

BEFORE THE BOARD OF COUNTY COMMISSIONERS
OF SPOKANE COUNTY, WASHINGTON

IN THE MATTER OF DESIGNATING)
THE MOST HIGHLY QUALIFIED) R E S O L U T I O N
ENGINEERING FIRM IN CONJUNC-)
TION WITH THE REMEDIAL DESIGN/)
REMEDIAL ACTION FOR COLBERT)
LANDFILL SITE)

WHEREAS, pursuant to the provisions of the Revised Code of Washington, Section 36.32.120(6), the Board of County Commissioners of Spokane County has the care of County property and the management of County funds and business; and

WHEREAS, pursuant to the provisions of chapter 39.80 RCW, the Board of County Commissioners must comply with certain procedures and policies in conjunction with employing a consultant to perform architectural and/or engineering services; and

WHEREAS, pursuant to the above-cited statutory sections, the Board of County Commissioners, in Resolution No. 87-1272, adopted a process for the selection of a consultant to perform certain tasks in conjunction with the remedial design/remedial action for the Colbert Landfill, which process was amended by Spokane County Resolution No. 88-0951; and

WHEREAS, the Board of County Commissioners of Spokane County has received a recommendation from the Colbert Consultant Selection Committee, with regard to the designation of a consultant to perform certain remedial design/remedial action(s) for the Colbert Landfill site; and

WHEREAS, the Board of County Commissioners, after fully considering the recommendation of the Colbert Consultant Selection Committee, a photocopy of which is attached hereto as Attachment "A" and incorporated herein by reference, does desire to accept such recommendation and designate a negotiating team to negotiate a contract with the firm designated the most highly qualified;

NOW, THEREFORE, BE IT RESOLVED by the Board of County Commissioners of Spokane County, pursuant to the provisions of chapter 39.80 RCW and Spokane County Resolutions No. 87-1272 and 88-0951, the Board of County Commissioners does hereby designate Landau Associates as the most highly qualified engineering firm in conjunction with the remedial design/remedial action(s) for the Colbert Landfill.

BE IT FURTHER RESOLVED by the Board of County Commissioners, that the Board does hereby designate a negotiating team consisting of the Spokane County Public Works Director, or his designee(s), and the Spokane County Prosecuting Attorney, or his designated deputies, to negotiate a contract with that firm designated the most highly qualified engineering firm, which contract, when negotiated, shall be forwarded to the Board of County Commissioners for subsequent execution at an open meeting.

BE IT FURTHER RESOLVED by the Board of County Commissioners, that in designating that firm deemed most highly qualified as provided for herein, the Board does enter the following Findings of Fact:

- (1) That the Board of County Commissioners, pursuant to the provisions of chapter 39.80 RCW, adopted a policy with respect to the selection of a consultant to perform certain tasks with respect to the remedial design/remedial action for

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Colbert Landfill, which policy was adopted under Spokane County Resolutions No. 87-1272 and 88-0951;

- (2) That the Board of County Commissioners has received a recommendation from the Colbert Consultant Section Committee recommending that Landau Associates be designated as the most highly qualified engineering firm for the remedial design/remedial action at the Colbert Landfill site; and
- (3) That the Board of County Commissioners finds that the process utilized by the Colbert Consultant Selection Committee to recommend the most highly qualified engineer firm for the remedial design/remedial action at the Colbert Landfill site is consistent with Spokane County Resolutions No. 87-1272 and 88-0951.

BE IT FURTHER RESOLVED by the Board of County Commissioners of Spokane County, Washington, that the designation of the most highly qualified firm, as provided for herein, is a procedural matter having no substantive effect on the quality of the environment and accordingly is exempt from the State Environmental Policy Act, WAC 197-11-800(20).

PASSED AND ADOPTED this 20 day of December, 1988.

BOARD OF COUNTY COMMISSIONERS
OF SPOKANE COUNTY, WASHINGTON

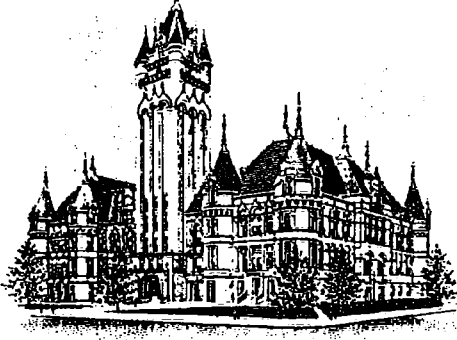
John R. McBratney
Patricia A. Mumme
Theresa A. Smith

ATTEST:

WILLIAM B. DONAHUE,
Clerk of the Board

Sharon Montoya
Deputy Clerk

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SPOKANE COUNTY COURT HOUSE

SPOKANE COUNTY

PUBLIC WORKS DEPARTMENT

OFFICE OF
COUNTY ENGINEER
RONALD C. HORMANN, P.E.
COUNTY ENGINEER

SPOKANE, WASHINGTON 99260-0170

December 12, 1988

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COUNTY COMMISSIONERS

Board of Spokane County Commissioners
W. 1116 Broadway Avenue
Spokane, WA 99260

RE: APPROVAL OF THE COLBERT CONSULTANT SELECTION COMMITTEE RECOMMENDATION FOR REQUEST FOR PROPOSAL (RFP) IN CONJUNCTION WITH THE DESIGN OF REMEDIAL ACTION AS SET FORTH IN THE RECORD OF DECISION FOR THE COLBERT LANDFILL

Dear Commissioners:

Using the consultant selection process for Request for Proposal (RFP), as per Resolution 87-1272, as amended, and as previously approved by the Board, the Colbert Consultant Selection Committee did receive proposals from two firms (AWD Technologies, San Francisco, California; and Landau Associates, Inc., Edmonds, Washington) responding to the RFP issued on October 18, 1988.

On November 9, 1988, copies of the written proposals and rating forms with selection criteria and weights assigned thereto were sent to the Selection Committee members for review. On December 6, 1988 the Selection Committee interviewed each firm and upon the conclusion of the interviews, using the selection criteria and weights assigned thereto, each firm's proposal was rated by the six Selection Committee Members. The firm of Landau Associates, Inc., Edmonds, Washington, received the higher composite rating of the two competing firms.

The Selection Committee therefore recommends Landau Associates, Inc., Edmonds, Washington, as being the most highly qualified firm to provide services required for the project. The Selection Committee hereby requests the Board's review and approval of the above recommendation and authorization to proceed to the consultant contract negotiation phase of the selection process.

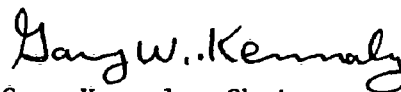
In conjunction with the consultant contract negotiation portion of the consultant selection process as outlined by Resolution 87-1272, as amended, the Board is to designate a negotiating team to negotiate a contract with the selected most highly qualified firm since Spokane County is now the lead agency. The Consultant Selection Committee recommends Dennis Scott, Spokane County Director of Public Works, be appointed as the Chairman of the

Page 2
December 12, 1988

Negotiating Team. The Chairman of the Negotiating Team would be given the authority to appoint various team members based on their experience and the particular area of the contract under negotiation. Both the Key Tronic Corporation and the U.S. Air Force indicated a willingness to assist the Negotiation Team Chairman, upon his request, during the negotiation process.

On behalf of the Consultant Selection Committee, thank you for providing the opportunity to work on this phase of this interesting and challenging project.

Very truly yours,



Gary Kennaly, Chairman
Colbert Consultant
Selection Committee

GWK/las

133

BEFORE THE BOARD OF COUNTY COMMISSIONERS
OF SPOKANE COUNTY, WASHINGTON

IN THE MATTER OF EXECUTING)
AN AGREEMENT WITH LANDAU) R E S O L U T I O N
ASSOCIATES, INC. IN CONJUNCTION WITH THE REMEDIAL DESIGN/REMEDIAL ACTION FOR)
THE COLBERT LANDFILL SITE)

WHEREAS, pursuant to the provisions of the Revised Code of Washington, Section 36.32.120(6), the Board of County Commissioners of Spokane County has the care of County property and the management of County funds and business; and

WHEREAS, pursuant to Resolution No. 88-1278, the Board of County Commissioners designated Landau Associates, Inc. as the most highly qualified engineering firm to perform the remedial design/remedial action at the Colbert Landfill site; and

WHEREAS, pursuant to Resolution No. 88-1278, the Spokane County Public Works Director and the Spokane County Prosecuting Attorney's Office has negotiated a contract with that firm, an unsigned copy of which contract is attached hereto and incorporated by reference herein; and

WHEREAS, Landau Associates, Inc. has orally approved the terms of said contract, but timing has not allowed the receipt by the County of a fully executed document by Landau for the Board of County Commissioners open meeting of March 21, 1989; and

WHEREAS, time is of the essence in having said contract executed, such that delaying the Board's execution of said contract until the next meeting of the Board of March 28, 1989, would be inadvisable;

NOW, THEREFORE, BE IT RESOLVED by the Board of County Commissioners of Spokane County, that either the Chairman of the Board of County Commissioners of Spokane County, or a majority of the Board, be and is hereby authorized to execute the attached contract (or similar contract with minor revisions) with Landau Associates, Inc., providing for the performance of professional engineering services in conjunction with the remedial design/remedial action for the Colbert Landfill site, at other than an open meeting.

PASSED AND ADOPTED this 21 day of March, 1989.

BOARD OF COUNTY COMMISSIONERS
OF SPOKANE COUNTY, WASHINGTON


John R. McBride


Patricia A. Mumney


Steven Hasson

COUNTY CLERK

ATTEST:
WILLIAM E. DOHAMUE,
Clerk of the Board

By 
Deputy Clerk

AGREEMENT TO PERFORM
ENGINEERING SERVICES
FOR
REMEDIAL DESIGN/REMEDIAL ACTION (RD/RA)
FOR COLBERT LANDFILL,
SPOKANE COUNTY, WASHINGTON

<u>Section</u>	<u>Subject</u>	<u>Page</u>
I	INCORPORATION OF RECITALS AND CONSENT DECREE.....	3
II	CONTRACT DOCUMENTS.....	3
III	SCOPE OF SERVICES.....	3
IV	CRITERIA AND CONDITIONS.....	5
V	TIME OF BEGINNING AND COMPLETION.....	7
VI	COMPENSATION AND TERMS OF PAYMENT.....	7
VII	COMPLIANCE WITH LAW.....	12
VIII	SUBLETTING OR ASSIGNING OF WORK.....	14
IX	LEGAL RELATIONS.....	15
X	TERMINATION OF AGREEMENT.....	20
XI	SPECIAL STIPULATIONS.....	22

This Agreement is made and entered into this 21ST day of MARCH, 1989, by and between Spokane County, a political subdivision of the State of Washington, having offices for the transaction of business at West 1116 Broadway Avenue, Spokane, Washington, hereinafter referred to as the "County", and Landau Associates, Inc., having offices for the transaction of business at 23107 - 100th Avenue West, P. O. Box 1029, Edmonds, Washington, 98020-1029, a Washington corporation, hereinafter referred to as the "Consultant".

This Agreement specifies the terms and conditions under which the Consultant will provide specified engineering consulting services to the County in support of Remedial Design/Remedial Action (RD/RA) for the Colbert Landfill in Spokane County, Washington, hereinafter referred to as the "Project".

R E C I T A L S

A. On January 9, 1989, the United States Environmental Protection Agency (EPA) and the Washington State Department of Ecology (DOE) filed a complaint in U. S. District Court for the Eastern District of Washington, Cause No. C-89-033-RJM, against the County and Key Tronic Corporation under federal and state hazardous waste and "Superfund" legislation. The complaint alleges that the County and Key Tronic are liable for the release, threatened release or disposal of hazardous substances, pollutants or contaminants at the Colbert Landfill site, located in Spokane County.

B. On February 28, 1989, the County and Key Tronic entered into a Consent Decree with the EPA and the DOE whereby the County agreed to implement the final remedial action plan set forth in the Consent Decree, for cleanup of the site. The Consent Decree incorporates by reference Appendices A, B, C and D. Pages VIII-1 and VIII-2 of Appendix B were amended by the Court on February 28, 1989, according to substituted language contained in Exhibit F, Supplemental Memorandum in Support of Motion for Entry of Consent Decree (filed with the Court).

C. Among other requirements, the Consent Decree:

(1) Provides for the establishment of schedules, dates and deadlines for the various steps and requirements, including without limitation, progress reports, work plans and other submittals;

(2) Identifies certain performance and compliance requirements (including, without limitation, statutory and regulatory criteria, standards, regulations, guidance and technical and procedural requirements) by which the work plans and scope of work are to be performed and accomplished;

(3) Provides for certain requisite approvals by the EPA and DOE;

(4) Establishes certain notification requirements (including timing) with regard to matters of dispute and certain procedures for resolution of disputes arising from carrying out the requirements of the Consent Decree;

(5) Establishes certain procedures and requirements (including timing) governing requests for extensions of schedules;

(6) Provides for certain penalties for violations of the Decree, including failure to make a submittal to DOE and EPA in accordance with the Decree or to comply with any required and approved time schedule; and

(7) Provides for implementation of remedial action by the EPA/DOE at the County's expense upon the County's failure without good cause to comply with the Consent Decree.

D. The Consent Decree requires the County to provide a copy of the Consent Decree to each contractor or subcontractor retained to perform work contemplated by the Consent Decree, and to condition any contract for such work on compliance with the Consent Decree.

E. The Consent Decree requires that the County preserve, during the pendency of the Consent Decree, and for ten (10) years from the date of its termination, all records, reports, documents, and underlying data in their possession, or in the possession of their employees and agents, relevant to the implementation of the Consent Decree, unless otherwise ordered by the Court. The County is further obligated to require all such records in the possession of contractors to be provided to them and to retain copies of all records which are nonduplicative.

F. The Consultant has been designated by the County as the most qualified firm, among those firms submitting proposals, to conduct the professional engineering services called for in this Agreement.

NOW, THEREFORE, in consideration of the mutual covenants and promises contained herein, the County and the Consultant mutually agree to the following terms, stipulations and conditions of this Agreement and any amendments thereto shall be binding upon both parties:

I. INCORPORATION OF RECITALS AND CONSENT DECREE

The Recitals above and the Consent Decree are incorporated by reference and made a part of this Agreement. Both parties have thoroughly reviewed the Recitals and the provisions of the Consent Decree.

II. CONTRACT DOCUMENTS

This Agreement includes and incorporates Sections I-XI, Attachment A - Scope of Services, and Attachment B - Estimated Cost Budget Summary as the contract documents.

III. SCOPE OF SERVICES

This Agreement is expressly conditioned upon the performance of Consultant's work in compliance with the Consent Decree.

The Consultant shall furnish all services and labor necessary to conduct and complete Phase I, including site investigation, pilot extraction well design and installation, treatment system development and analysis, and facility evaluation services, as well as Phase II, design, plans and specifications, all as further described in Attachment A - Scope of Services.

The Consultant may subcontract certain elements of work, including but not limited to:

- (1) Evaluation, design and operation of the pilot treatment system;
- (2) Design of pipelines, utilities and structures;
- (3) Surveying;
- (4) Public relations;
- (5) Well drilling and development;
- (6) Water quality testing; and
- (7) Construction of facilities.

For the purposes of this Agreement, "Major Subconsultants" shall be defined as those firms or individuals retained by the Consultant to perform professional engineering and surveying services within the Scope of Services; "Major Subcontractors" shall be defined as those firms or individuals retained by Consultant, or by Major Subconsultants, to provide chemical laboratory testing services, well drilling and development, pilot water treatment equipment, and construction of piping systems. The term "subcontractors" shall include Major Subconsultants, Major Subcontractors, and all subcontractors and subconsultants providing services within the Scope of Services.

The Consultant is the lead engineering consultant for performance of the services provided for in this Agreement, and shall employ, be responsible for, and direct the work of all necessary subcontractors.

The Consultant shall ascertain such information as may have a bearing on the project from local units of government and public and private utilities, and shall be authorized to procure information from other authorities besides the County. The Consultant shall keep the County advised as to the extent of these contacts and the results thereof.

IV. CRITERIA AND CONDITIONS

The Consultant shall have sufficient knowledge, experience and training to apply the latest edition of applicable state and federal health and safety requirements for working at hazardous waste sites insofar as they apply to the Project.

Except as otherwise provided in this Agreement, the Consultant shall with due diligence furnish all necessary qualified personnel and subcontractors, materials and equipment, and manage and direct the same to complete the Scope of Services within the schedule established by the Consent Decree.

The Consultant shall assist the County in timely meeting and fully complying with pertinent requirements of the Consent Decree, in an economical and cost effective manner for the County. The Consultant will promptly alert the County as to matters that the Consultant becomes aware of and which require notification by the County under the Consent Decree, including but not limited to timely requests for extensions of time, or objections to actions or decisions of the EPA or DOE, which are or may be the subject to the dispute resolution provisions of the Consent Decree.

The Consultant's services shall be coordinated with the County Public Works Director (or his authorized designee), who may issue written or oral instructions regarding Consultant's performance of the Project. Any instructions that materially effect the scope of services, price, period of performance, or any other provision of this Agreement, shall require an amendment to this Agreement executed with the same formalities as this Agreement. However, a change or increase in the Scope of Services that is compensated through the County's utilization of the contingency funds provided for in Section VI shall not require an amendment to this Agreement.

The Consultant shall ensure that a copy of the Consent Decree is provided to each Major Subconsultant and Major Subcontractor retained to perform work under the Scope of Services contained in this Agreement.

As required in Appendix D of the Consent Decree, and at the request of the County and EPA, the Consultant shall in conjunction with the County furnish the personnel, services, documents and materials needed to assist the EPA in the collection of evidence to document work performed and costs expended by the Consultant or its subcontractors pursuant to this Agreement in order to aid cost recovery efforts by the United States. Such assistance shall include providing all requested assistance in the interpretation of evidence and costs and providing requested testimony. All such assistance provided by the Consultant or its subcontractors, requested by the County or EPA, shall be considered extra work and

shall entitle the Consultant to an equitable adjustment in compensation and other provisions of this Agreement that may be effected.

V. TIME OF BEGINNING AND COMPLETION

This Agreement shall be effective from its date of execution by the County until completion of the Scope of Services.

Established completion times for tasks may be extended due to delays attributable to the County, unavoidable delays caused by governmental action or other conditions beyond the control of the Consultant, or by mutual consent of the County and the Consultant. The Consultant may adjust its personnel to meet required schedules, but time adjustments for completion may be made only upon written approval of the County.

The County shall have the right to review and examine the Consultant's work and products at any time. Regular progress reports shall be prepared by the Consultant as specified in the Consent Decree and Attachment A. Additional progress reports may be required by the County in the event of delays attributable to the Consultant.

VI. COMPENSATION AND TERMS OF PAYMENT

Compensation by the County to the Consultant shall be as follows (see Attachment B):

A. Cost Plus Fixed Fee.

(1) For those services enumerated in Section III above, the Consultant shall be paid its Direct Payroll, Overhead, Direct Expenses and a Fixed Dollar Fee. A Maximum Price has

been established in the sum of Four Million Three Hundred Thousand and no/100 Dollars (\$4,300,000.00), which shall not be exceeded without a formal amendment to this Agreement.

(2) The Fixed Dollar Fee of Three Hundred Eighty-Two Thousand Nine Hundred and no/100 Dollars (382,900.00) may not be increased or decreased, except in the case of a formal amendment to this Agreement which recognizes a change in the scope of services or performance of the Consultant.

(3) The Maximum Price includes a contingency fund of approximately fifteen percent (15%) of the Cost (see Attachment B), representing a sum of Four Hundred Ninety-Eight Thousand, Three Hundred and no/100 Dollars (\$498,300.00). Contingency funds will be made available to the Consultant only with the written consent of the County Public Works Director, and usage shall be limited to work scope items defined by the County. Any increase in the Fixed Dollar Fee shall be negotiated between the Parties hereto.

B. Maximum Price. The Consultant shall make reasonable efforts to complete the Scope of Services within the Maximum Price and shall keep the County informed of the financial progress of expenditures so that the Maximum Price or work effort can be adjusted if found to be necessary. The Maximum Price shall not be exceeded without the County's prior written approval, and the County is not otherwise obligated to pay the Consultant for costs incurred beyond the Maximum Price. The County may require the Consultant to complete at cost any and all work within the current

scope of services remaining unperformed at the time the Maximum Price is reached, without any adjustment in the Fixed Dollar Fee. When the Maximum Price is increased, the Consultant's excess costs expended before such increase shall be allowable to the same extent as if such costs had been incurred after the approved increase.

C. Direct Payroll Cost. Direct Payroll Cost is the sum of the direct salaries or wages paid to the employees of the Consultant and its Major Subconsultants for work directly performed pursuant to this Agreement, exclusive of all payroll related taxes, payments, premiums and benefits. The Direct Payroll Cost is estimated to be Six Hundred Seventy-Three Thousand and no/100 Dollars (\$673,000.00).

D. Overhead. Overhead is the total overhead cost applicable to the services performed by the Consultant and Major Subconsultants pursuant to this Agreement. A negotiated overhead of One Hundred Sixty-One Percent (161%) of the Direct Payroll Cost shall be utilized to determine compensation by the County for all services described in Attachment A, or compensated through use of the County's contingency fund.

E. Direct Expenses. Direct Expenses include all reasonable and necessary expenses incurred by Consultant and Major Subconsultants in performing the services pursuant to this Agreement, other than the Direct Payroll Cost and Overhead. Direct Expenses shall include but are not limited to rebillables for project purchases,

travel, communications, equipment rental, printing, company owned equipment charge, and subcontractor costs.

F. Terms of Payment.

(1) The Consultant shall be paid monthly by the County for services completed pursuant to this Agreement. Invoices shall be sent to: Dean Fowler, Spokane County Utilities Department, North 811 Jefferson, Public Works Building, Spokane, Washington, 99260-0170.

Invoices shall detail the employee hours, hourly payroll cost, overhead, direct expenses and prorated amount of the Fixed Fee.

(2) Payment shall be made to Consultant by the County within thirty (30) days after receipt by the County of the Consultant's invoice and appropriate documentation. The County shall pay interest on any overdue amounts at the rate of one percent (1%) per month, but at least one dollar (\$1.00) per month. Payments shall not be deemed past due as to any amounts required to be withheld under state or federal law or when the County supplies written notice that payment is being withheld because of a good faith dispute; provided, that resolution of such dispute in Consultant's favor shall entitle Consultant to the interest under this subparagraph that would otherwise be due on the delinquent and unpaid amounts. Payments by the County shall first be credited to interest and then to principal.

(3) Payment shall constitute full compensation for services rendered and for all supervision, labor, supplies, materials, equipment or use thereof, and for all other incidentals necessary to complete the scope of services under this Agreement.

(4) The Consultant shall permit the County, from time to time as the County deems necessary (including after the expiration or termination of this Agreement), to inspect and audit at any reasonable times at the Consultant's or subconsultants' offices, all pertinent books and records of the Consultant and any subconsultants or other person or entity that has performed services or work in connection with or related to the Consultant's services under this Agreement, to verify the accuracy of accounting records; and shall supply the County with, or shall permit the County to make, a copy of any books and records and any portion thereof requested. The Consultant shall require that such inspection, audit, or copying right of the County is a condition of any subcontract, agreement, or other arrangement under which any other person or entity is permitted to perform work in connection with or related to the Consultant's services under this Agreement.

The Consultant shall keep complete and accurate time records with respect to all salaries paid as well as complete and accurate records in accordance with generally accepted accounting practices of all other reimbursable costs and

expenses for purposes of audit. These records shall be retained and made available for inspection by any authorized representative of the County, state or federal government for a period of six (6) years after expiration or termination of this Agreement. At the end of the six (6) year period, the County shall be notified by the Consultant of the intent of the Consultant or any subcontractor to destroy or discard such records, in order to allow the County the opportunity to take possession of such records before they are destroyed.

VII. COMPLIANCE WITH LAWS

A. General Requirement. The Consultant shall perform and comply with all applicable laws of the United States, the State of Washington; and the laws and ordinances of local agencies, including the ordinances of Spokane County; and rules, regulations, orders, and directives of their administrative agencies and the officers thereof.

B. Licenses and Similar Authorizations. The Consultant shall secure and maintain in full force and effect during the term of this Agreement all required licenses, permits, and similar legal authorizations, and comply with all requirements thereof; except for any permits and licenses required of the County for construction or operation of the Project.

C. Nondiscrimination and Affirmative Action. During the performance of this Agreement, the Consultant agrees not to discriminate against any employee or applicant for employment because of race, religion, creed, color, sex, marital status,

sexual orientation, political ideology, ancestry, national origin, or the presence of any sensory, mental or physical handicap, unless based upon a bona fide occupational qualification. The Consultant will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their creed, religion, race, color, sex, national origin, or the presence of any sensory, mental or physical handicap. The Consultant shall incorporate this provision in all subcontracts as a requirement of the respective subcontractor.

D. Women's and Minority Business Enterprise Utilization.

During the term of this Agreement, the Consultant is encouraged to meet the following minimum goals in purchases and contracts, expressed as a percentage of the total dollars available for the purchase or contract:

Minority-owned business participation - 10%.

Women-owned business participation - 6%.

The Consultant is further encouraged to:

1. Include qualified minority and women's business on solicitation lists;
2. Ensure that qualified minority and women's business are solicited whenever there are potential sources of services or supplies;
3. Divide the total requirements, when economically feasible into smaller tasks or quantities to permit maximum participation by qualified minority and women's business;
4. Establish delivery schedules where requirements of the work permit, which will encourage participation of qualified minority and women's business; and

5. Use the services and assistance of the State Office of Women and Minority Owned Business and Office of Minority Business Enterprises of the U. S. Department of Commerce as appropriate.

In the event that the County, as a result of grant or funding requirements or other reasons, subsequently requires that the Consultant meet the above goals, the County shall negotiate with the Consultant an equitable adjustment in compensation and terms of performance necessitated by the Consultant's compliance with said goals.

E. Employment. Any and all employees of the Consultant or subcontractor while engaged in the performance of any services required by the Consultant under this Agreement shall be considered employees of the Consultant or subcontractor and not of the County, and any and all claims made by any third party as a consequence of any negligent act or omission on the part of the consultant's employees or other persons while so engaged in any of the work or services provided to be rendered herein shall be the obligation and responsibility of the Consultant.

The Consultant shall not engage, on a full or part time basis, or other basis during the period of the Agreement, any professional or technical personnel who are or have been at any time during the period of the Agreement in the employ of the County except retired employees, without the written consent of the County.

VIII. SUBLETTING OR ASSIGNING OF WORK

The Consultant shall not subcontract any of the services or

work covered by this Agreement or any amendment thereof without prior notification of the County.

This Agreement or any amendments thereto are not assignable by the Consultant either in whole or in part.

The Consultant may employ outside specialists to enable the Consultant to complete services as defined under Section III (SCOPE OF SERVICES) of this Agreement or any amendment thereto. Compensation for outside specialists shall be made in accordance with the terms and rates agreed upon between the County and the Consultant and shall be included within the Maximum Price specified under Section VI (COMPENSATION AND TERMS OF PAYMENT) of this Agreement.

IX. LEGAL RELATIONS

A. Applicable Law; Venue. This Agreement shall be construed and interpreted in accordance with the laws of the State of Washington. The venue of any action brought hereunder shall be in the Superior Court for Spokane County.

B. Errors and Omissions; Correction. The Consultant shall be responsible for the professional quality, technical accuracy and the coordination of all designs, drawings, specifications, and other services furnished by or on the behalf of the Consultant under this Agreement or any Supplements thereto. The Consultant, without additional compensation, shall correct or revise any errors or omissions in the designs, drawings, specifications and/or other Consultant services immediately upon notification by the County. The Consultant's obligations under this subsection B

shall continue after the termination or expiration of this Agreement.

C. Indemnity. The indemnification provided for in this Section IX with respect to any negligent acts or omissions during the term of this Agreement shall survive any termination or expiration of this Agreement.

The Consultant agrees to indemnify and hold harmless the County, its officers, agents, servants and employees from and against any claim, suit, action, or liability, including expenses incident thereto (each, a "Consultant indemnified claim or liability") arising from, but not limited to, bodily injury or death (including bodily injury or death to employees of Consultant or its subcontractors), or physical injury to or loss of use of property, arising from the negligence or willful misconduct under this Agreement of the Consultant, its subcontractors, or their respective directors, officers, agents, servants or employees.

The County acknowledges that Consultant played no part in the creation or presence of Pollution Conditions, (as defined below) if any, which may exist at the Site (as defined below). The County agrees that Consultant's only involvement with the Site is to perform services in accordance with the terms of this Agreement.

The County agrees to indemnify and hold harmless Consultant, its directors, officers, agents, servants and employees from and against any claim, suit, action or liability including expenses

incident thereto arising out of services performed under this Agreement when such County-indemnified claim or liability is based on bodily injury to or death of a third party, physical injury to or loss of use of property of a third party or clean-up costs (including studies and design) which result from Pollution Conditions (as defined below) existing at or emanating from the Site (as defined below) prior to, during or after completion of Services performed under this Agreement, except to the extent that such bodily injury or death of a third party or physical injury to or loss of use of property of a third party, or increased clean-up costs (including studies and design), is caused by the negligence or willful misconduct of Consultant or its subcontractors, or their respective directors, officers, agents, servants or employees.

The County agrees to indemnify and hold harmless Consultant from any and all reasonable attorney's fees incurred by Consultant or its subcontractors or their respective directors, officers, agents, servants or employees incident to any third party claim or liability described in this subsection C if such claim or liability does not involve negligence or willful misconduct of Consultant or its subcontractors or their respective directors, officers, agents, servants or employees; provided further, that this indemnification shall be inapplicable if such claim or liability (and the duty to defend the same) is covered under any policy of insurance required of or maintained by any indemnitee.

The foregoing obligation of each party to indemnify and hold harmless is conditioned upon: a) receipt by the indemnifying party of prompt written notice from an indemnitee of any circumstances that are likely to give rise to any claim or liability or any actual claim or liability that falls within the scope of this indemnity, b) the indemnifying party's right to conduct the defense or settlement of any action related to any such claim or liability, and c) the indemnitee's cooperation with the indemnifying party in any such defense.

For the purpose of this Section IX, a) the term "Pollution Condition" shall mean the actual or alleged existence, discharge, dispersal, release, or escape of smoke, vapors, soot, fumes, acids, alkalis, toxic chemicals, liquids or gases, waste materials or other irritants, contaminants or pollutants into or upon land, the atmosphere, or any water course or body of ground or surface water, b) the term "Site" means the land and structures constituting the facilities of the County (specifically the Colbert Landfill) and the surrounding area or any other property designated by the County or by the Consent Decree, and c) the term "third party" excludes employees of the Consultant, their subcontractors or agents, and the County.

D. Remedies Cumulative. Rights under this Agreement are cumulative; the failure to exercise on any occasion any right shall not operate to forfeit such right on another occasion. The use of one remedy shall not be taken to exclude or waive the right to use another.

E. Professional Liability Insurance. Consultant shall at its own expense procure and maintain in full force and effect during the term of this Agreement a policy of professional liability insurance providing coverage of at least \$1,000,000 against professional liability for errors and omissions in connection with the professional engineering services to be performed by the Consultant under this Agreement. The Consultant shall furnish evidence of such insurance to the County in such forms and at such times as the County shall reasonably require. The Consultant shall maintain such professional liability coverage, if such insurance is reasonably available, for a period of three (3) years after the termination of this Agreement, or any supplement thereto.

These insurance amounts and evidence of coverage shall be required of all Major Subconsultants furnishing professional services for the Consultant.

F. General Liability Insurance. Prior to undertaking any services under this Agreement, the Consultant, at its own expense, shall obtain and file with the County evidence of a policy of general comprehensive and vehicle liability insurance, which policies (1) shall be subject to approval by the County as to company, form and coverage; (2) must fully protect the County from claims and risks in connection with activities by the consultant by virtue of this Agreement; and (3) shall name the County as additional insured. Such policy shall cover at least the following:

Comprehensive - General Liability Insurance - \$1,000,000 per occurrence, combined single limit.

Comprehensive - Automobile and Vehicle Liability Insurance- \$1,000,000 per occurrence, combined single limit (including all on-site and off-site operations; all owned, non-owned, leased or hired vehicles).

These insurance amounts and evidence of coverage shall be required of all Major Subconsultants and subcontractors providing site activities, including, but not limited to, well drilling.

Said general comprehensive and vehicle liability insurance policy and subsequent renewals must be maintained in full force and effect at no expense to the County throughout the entire term of the Agreement and any Supplement thereto. The respective insurance policies shall state that coverage will not be cancelled, suspended, or reduced in coverage or in minimal limits except after thirty (30) days written notice by certified mail has been given to the County.

G. Worker's Compensation. Consultant shall maintain worker's compensation coverage under the Washington State Worker's Compensation Act.

X. TERMINATION OF AGREEMENT

A. Termination of Agreement for Cause. Either party may terminate this Agreement or any Supplement thereto in the event the other fails to materially perform its obligations as described in this Agreement, and such material failure has not been corrected in a timely manner after notice of breach has been provided to the nonperforming party.

B. For Reasons Beyond Control of Parties. Either party may terminate this Agreement or any Supplement thereto without recourse by the other where performance is rendered impossible or impracticable for reasons beyond such party's reasonable control such as, but not limited to, acts of nature; war or warlike operations; civil commotion; riot; labor dispute including strike, walkout, or lockout; sabotage; or superior governmental regulation or control.

C. Termination by County for Any Reason. The County may terminate this Agreement for any reason, other than as recited in Subsections A and B above, upon thirty (30) days written notice to the Consultant. In such event, the County shall pay Consultant for all work previously authorized and performed before the termination date, including the prorated Fixed Fee; as well as reasonable termination expenses, including reassignment of personnel, subcontractor termination costs incurred by Consultant and related closeout costs.

D. Notice. Notice of termination pursuant to Subsections A and B above shall be given by the terminating party to the other party at least twenty (20) days prior to the effective date of termination.

E. No Waiver of Remedies. Nothing herein shall be construed to limit the parties' remedies for material breach of contract. The County is not obligated to pay any fees or expenses which specifically involve negligent acts or omissions by the Consultant.

XI. SPECIAL STIPULATIONS

A. General. The services under this Agreement shall at all times be subject to the general review and approval of the County. The Consultant shall periodically, during the progress of the work, confer with the County, and shall be subject to the direction of the County and shall prepare and present such information and materials as may be pertinent, necessary, or as may be requested by the County to determine the adequacy of the services.

The working relationship as indicated herein shall exist at the discretion of the Public Works Director; it may be revised at any time upon written notice, at the sole discretion of the Director.

B. Contractual Relationship. This Agreement or any supplement thereto does not constitute the Consultant as the agent or legal representative of the County for any purpose whatsoever. The Consultant is not granted any express or implied right or authority to assume or create any obligation or responsibility on behalf of or in the name of the County or to bind the County in any manner or thing whatsoever.

C. Addresses for Notices and Deliverable Materials. All notices and other material to be delivered hereunder shall be in writing and shall be delivered or mailed to the following addresses:

If to the County:

Mr. Dean Fowler
Spokane County Utilities Department

North 811 Jefferson
Public Works Building, First Floor
Spokane, Washington 99260-0170

If to the Consultant:

Landau Associates, Inc.
(23107 - 100th Avenue West)
P.O.Box 1029
Edmonds, Washington 98020-1029

or such other respective addresses as either party may from time to time designate in writing.

D. Professional Services. The Consultant represents that the services furnished under this Agreement will be in accordance with generally accepted professional practices. Any estimate of cost of equipment, construction, ownership or operation furnished by the Consultant shall be the Consultant's opinion based upon its professional judgment and experience.

E. Endorsement. The Consultant, or its subconsultants where applicable, shall endorse all plans and specifications prepared pursuant to this Agreement.

F. Ownership of Documents. All drawings, plans, prints, specifications, field notes and other related documents prepared or obtained by the Consultant and its subcontractors in connection with the provision of services under this Agreement are and shall be the County's property, and such material shall be delivered to the County upon request. The County agrees to indemnify and hold harmless the Consultant from and against any claims arising out of the subsequent use by the County of any documents provided under this Agreement for any purpose other than the work anticipated under this Agreement. The Consultant shall retain the original of

all records, reports, documents and underlying data generated by the Consultant, for a period of ten (10) years after expiration or termination of this Agreement, and the Consultant shall also require its subcontractors to meet this same requirement on behalf of the County.

G. Strict Compliance Required. Strict compliance with the terms of this Agreement is essential for the legal disbursement of public funds, for the purposes described herein. Deviation of any sort from the Agreement terms must be authorized formally in writing. No other authority for deviation from the Agreement will be recognized as proper and official.

H. Amendments. No modification or amendment of the provisions hereof shall be effective unless in writing and signed by the parties hereto. The parties hereto expressly reserve the right to modify this Agreement, from time to time, by mutual agreement.

I. Executory Agreement. This Agreement will not be considered valid until executed by both the County and the Consultant.

J. Binding Effect. The provisions, covenants and conditions in this Agreement apply to bind the parties, their legal heirs, representatives, successors and assigns.

K. Severability. If any of the provisions contained in this Agreement are held for any reason to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability will not effect any other provisions, and this

Agreement shall be construed as if such invalid, illegal or unenforceable provision had never been contained herein.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed on the day and year first set forth above.

BOARD OF COUNTY COMMISSIONERS
OF SPOKANE COUNTY, WASHINGTON

John R. McBride
John R. McBride

Patricia A. Mummey
Patricia A. Mummey

Steven Hasson
Steven Hasson

ATTEST:

WILLIAM E. DONAHUE,
Clerk of the Board

By Shirley Brontje
Deputy Clerk

LANDAU ASSOCIATES, INC.

By Henry G. Landau 23 Mar 89
Signature Date

Henry G. Landau
Type or Print Name

President
Title

600 557 469
Washington State Certification
of Registration Tax Number
(Department of Revenue)

ATTACHMENT A

COLBERT LANDFILL REMEDIAL DESIGN/REMEDIAL ACTION SCOPE OF ENGINEERING SERVICES

INTRODUCTION

This Scope of Services (SOS) for engineering services relates to the remedial design/remedial action for the Colbert Landfill site, is based on the Colbert Landfill Consent Decree Scope of Work (Appendix B of the Consent Decree, hereafter referred to as Scope of Work), and addresses Phase I Remedial Design, Phase I Remedial Action (pilot study), and Phase II Remedial Design.

PHASE I REMEDIAL DESIGN

Schedule for Deliverables

Within one month of authorization to proceed, the Consultant shall prepare a submission schedule for delivery of the Phase I work plans and additional documentation described in Section XI of the Scope of Work. This schedule shall identify submittal dates for the following:

- o Health and Safety Plan;
- o Quality Assurance Project Plan;
- o Phase I Pilot Well Plan;
- o Phase I Ground Water Monitoring Plan;
- o Phase I Treatment and Discharge Plan;
- o Phase I Engineering Report; and
- o Phase I Progress Reports.

The basis for establishing a schedule for preparation of the Phase II Work Plan and Phase II Plans and Specifications shall also be addressed.

Preparation of Work Plans

As specified in the Scope of Work, all work accomplished during Phase I shall be performed in accordance with approved work plans. The Consultant shall prepare all work plans in accordance with the appropriate EPA guidance documents. The works plans required for Phase I activities include:

- o Health and Safety Plan;
- o Quality Assurance Project Plan;
- o Phase I Pilot Well Plan;
- o Phase I Ground Water Monitoring Plan;
- o Phase I Treatment and Discharge Plan;
- o Data Management Plan; and (if required)
- o Community Relations Plan.

Review of Available Data

The Consultant shall review all available data prior to initiating Phase I remedial activities. The primary sources of existing data are the Remedial Investigation/Feasibility Study (RI/FS) and ground water chemical data collected by the Colbert Landfill Ground Water Sampling Committee subsequent to completion of the RI/FS.

Property Access and Permitting

The County shall take the lead in property access, but the Consultant shall assist the County in determining the locations required for remedial facilities, and identifying alternative locations which may be pursued should access to the primary site be denied. The Consultant shall assist the County in developing

an approach to permitting during the early stages of Phase I design.

PHASE I PILOT STUDY CONSTRUCTION

The Consultant shall undertake Phase I pilot study construction in a two-step process. First, the Consultant shall conduct additional site characterization activities to better define the geohydrology and contamination distribution in proximity to the proposed locations for the south, west, and east extraction systems. Additional characterization shall consist primarily of the installation of ground water monitoring wells, ground water sampling and chemical analyses, and evaluation of geohydrologic parameters such as ground water flow direction and aquifer saturated thickness. Second, the Consultant shall use these data to select final pilot study design parameters and facility locations.

Drilling Program

In order to implement the Phase I drilling program in a timely and cost-effective manner, the Consultant shall use a combination of air rotary and cable tool drilling techniques. Due to the variable geohydrologic conditions in the south, west, and east areas, the Consultant shall implement separate drilling approaches for each area, as subsequently described in this section.

For the purposes of this SOS, it shall be assumed that the regulatory authorities will not require any greater control of excess drilling water and soil cuttings during Phase I activities than were required during field activities for the Remedial

Investigation. Should more stringent control be imposed, the Consultant shall modify the drilling program to include more cable tool drilling and less air rotary drilling. If so required, the schedule and cost for drilling activities shall also be modified to reflect the additional time required for drilling.

Pilot Study Treatment Systems

The pilot treatment systems shall be specifically designed to treat the influent compounds and anticipated concentrations shown in Table 1; anticipated concentrations may be modified by the Consultant based on preliminary Phase I ground water monitoring results. The required effluent quality of specific parameters is listed in Table 2. The presence and desired removal of any additional compound(s) not shown in Table 1 shall be discussed with the County for possible impact on the overall scope of work.

Table 1. EXPECTED GROUND WATER QUALITY

	Anticipated influent concentration (ppb)		
	South	West	East
1,1,1 trichloroethane	420	1,400	1,900
1,1-dichloroethylene	10	100	100
1,1-dichloroethane	210	100	65
Trichloroethylene	10	14	10
Tetrachloroethylene	--	4	--
Methylene chloride	--	630	500

Table 2. REQUIRED EFFLUENT QUALITY

	Evaluation criteria (ppb)
1,1,1 trichloroethane	200
1,1-dichloroethylene	7
1,1-dichloroethane	4,050
Trichloroethylene	5
Tetrachloroethylene	7
Methylene chloride	25

Chemical Analysis

As specified in the Scope of Work, chemical analyses shall focus on the six compounds:

1,1,-Trichloroethane
 1,1,-Dichloroethylene
 1,1,-Dichloroethane
 Trichloroethylene
 Tetrachloroethylene
 Methylene Chloride

Analyses shall be performed using EPA Method 8010. Analyses shall also be performed for other parameters (such as temperature, pH, conductivity, hardness, iron, and manganese) based on requirements determined during Phase I and Phase II treatment system design activities. Additional indicator parameters commonly associated with sanitary landfill leachate (such as Chemical Oxygen Demand [COD], Total Organic Carbon [TOC], Chloride, Sulfate, Nitrate, and Total Suspended Solids) shall be analyzed for from some west and east system monitoring wells close to the landfill site to assess the potential impact of landfill leachate on Phase II treatment system design.

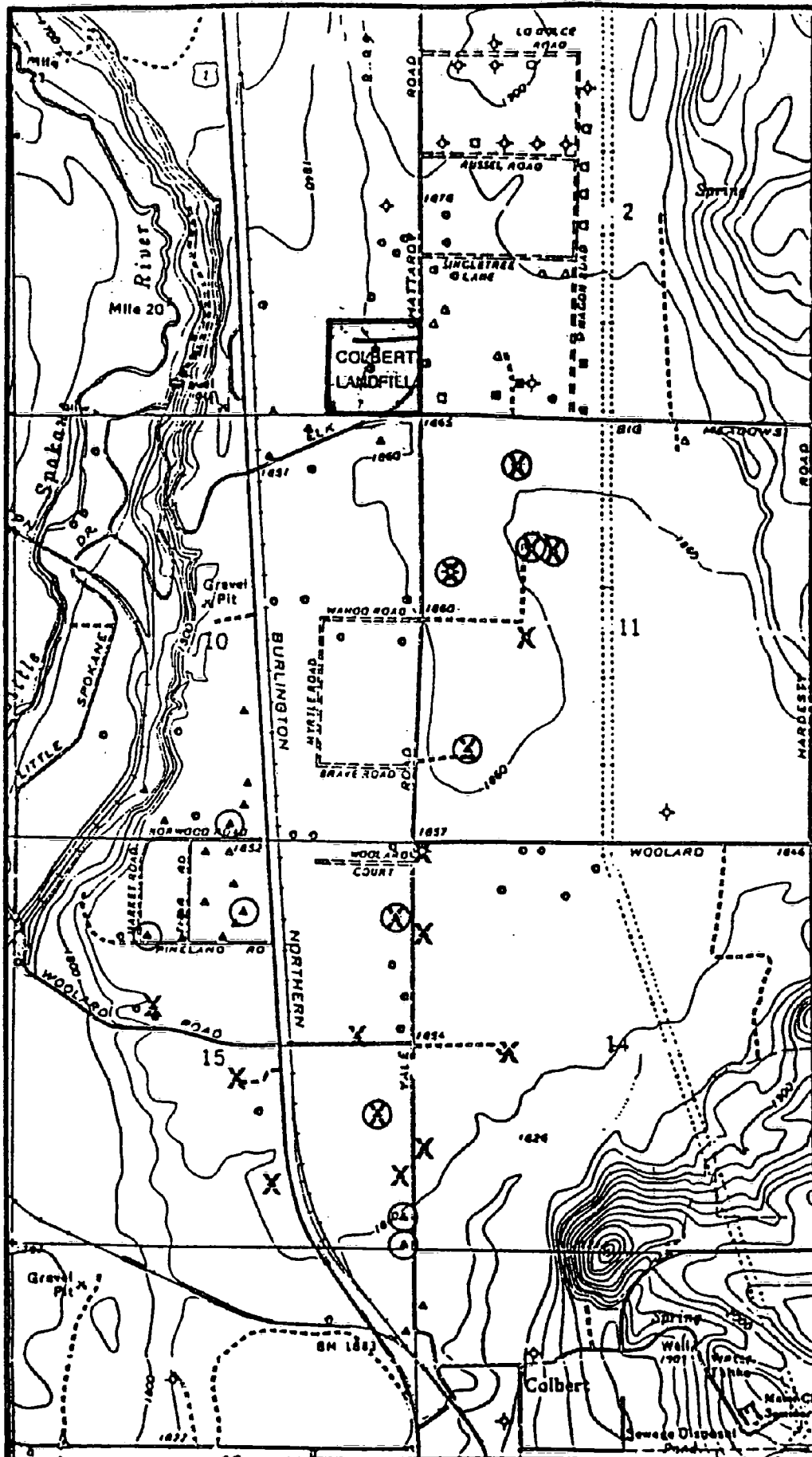
South System

The Consultant shall accomplish additional evaluation of the upper sand and gravel aquifer prior to final selection of the initial Phase I-South monitoring well locations to minimize the

possibility of the mislocation of these wells. First, the Consultant shall verify ("field truth") well depths and static water levels for existing domestic wells near the tentative location selected for the south system, and along the east margin of the upper sand and gravel aquifer. In conjunction with field truthing of these domestic wells, a ground water elevation survey shall be accomplished to better define ground water flow direction near the leading edge of the contaminant plume in the upper aquifer. An elevation survey of selected domestic wells shall be accomplished as part of this ground water elevation survey. Figure 1-A shows the wells the Consultant intends to evaluate as part of this characterization effort for the south system, specific wells shall depend on property access.

If contamination migration in the upper aquifer cannot be adequately characterized for initial Phase I monitoring well selection following this preliminary investigation, the Consultant shall consider conducting a soil/gas survey. Prior to making a final recommendation to the County, the Consultant shall obtain (from Ecology) and evaluate the QA/QC procedures used for the RI soil/gas survey and assess the probability of obtaining useful information from an additional soil/gas survey. The soil/gas survey (if accomplished) is not included in the present SOS.

Following the preliminary evaluation just described (with or without a soil/gas survey), the Consultant shall install three ground water monitoring wells for additional characterization of the geohydrologic properties and contamination distribution near



KEY

- Elevation Survey
- X Well Depth Determination

0 2000
Scale in Feet

LANDAU ASSOCIATES, INC.

Field Verification Locations
Upper Aquifer

the leading edge of the plume in the upper sand and gravel aquifer. The approximate locations for these initial monitoring wells are shown on Figure IV-1 of the Scope of Work. However, these locations may be modified based on the additional evaluation previously described.

It is anticipated that the wells for the south system will be approximately 100 feet deep. The Consultant shall use air rotary drilling (Odex method) for all wells (monitoring and pilot) constructed within this area. Only cutting samples shall be collected for drilling above the water table (about the upper 80 feet). However, drive samples shall be obtained on approximately 5-foot intervals from the water table to the base of the upper aquifer. The Consultant shall construct monitoring wells using threaded 2-inch Schedule 80 PVC pipe, install a sandpack to about 10 feet above the well screen, and grout the remainder of the boring using bentonite slurry.

The Consultant shall collect ground water samples from these initial monitoring wells for chemical analysis and shall select the final location for the pilot extraction well based on the subsequent chemical results and geohydrologic evaluation. The Consultant shall construct the pilot extraction well using 6- or 8-inch diameter steel casing and a stainless steel screen. If the selected pilot well location is not close to at least one of the three initial monitoring wells, the Consultant shall install up to two additional monitoring wells to assess the performance of the pilot well; these additional monitoring wells (if required) are not included in the present SOS. The pilot well and additional monitoring wells (if required) shall be

constructed using the same drilling, sampling, and chemical analyses procedures as the initial three monitoring wells.

The Consultant shall install an air stripping tower for treatment of extracted water during Phase I-South pilot study operations. This treatment system shall be sized and equipped to accommodate anticipated Phase I discharge rates and contaminant mass flux.

The Consultant shall bury Phase I pipelines. The Consultant shall size the Phase I-South discharge line to accommodate anticipated Phase II flows along that portion of the discharge line where Phase I and Phase II discharges are anticipated to follow a common utility corridor. The Consultant shall convey Phase I discharge water a sufficient distance to the north of the pilot well (about 2000 feet) to minimize interference with Phase I pilot studies, and then recharge the effluent to the shallow sand and gravel aquifer.

West System

The alignment for the Phase II-West interception system has been specified in the Scope of Work. Therefore, the Phase I-West pilot study will not form the basis for the location of the interception system with respect to the leading edge of the plume; rather it shall be used to obtain sufficient geohydrologic and chemical data for proper design of the Phase II-West system.

Initially, the Consultant shall install ground water monitoring wells at the four approximate locations shown on Figure IV-3 of the Scope of Work. Up to three monitoring wells shall be installed at each of these monitoring well locations, all

screened within the lower sand and gravel aquifer. To minimize the possibility of cross contamination between the upper and lower aquifers, monitoring wells shall be constructed in clusters with a single well in each boring.

Monitoring wells (and the pilot well) shall be installed using air rotary (Odex) drilling. The casing shall be sealed and downsized within the lacustrine unit to minimize the potential for downward migration of contaminants from the upper sand and gravel aquifer. The boring shall be advanced until the base of the lower sand and gravel aquifer is encountered, estimated to be 350 feet from the ground surface based on available data. The Consultant shall collect soil cutting samples during boring advancement, and shall obtain drive samples from the base of the lower sand and gravel aquifer for verification purposes. The Consultant shall accomplish monitoring well installation using 2-inch Schedule 80 PVC pipe, and shall install a natural sandpack throughout the lower sand and gravel aquifer and grout the remainder of the boring using bentonite slurry.

Following installation and development, the Consultant shall sample the monitoring wells and the samples shall be analyzed as described for the south system.

The Consultant shall design the Phase I-West pilot well based on the geohydrologic and chemical results obtained from the initial monitoring wells. The pilot well shall be installed near the location shown on Figure IV-3 of the Scope of Work (unless initial monitoring well data indicate a more appropriate location), using air rotary drilling techniques (Odex). The pilot

well shall be constructed of 6- to 8-inch steel casing with stainless steel screen and a seal shall be placed within the lacustrine unit, as previously described for the Phase I-West monitoring wells.

Evaluation of the proposed Phase I-West gravity stripping pilot treatment facility shall be delayed until some time during Phase II operations, and conventional air stripping shall be used for treatment of Phase I-West extracted ground water. The Consultant shall use a central treatment facility for Phase I-West and East systems located at or near the landfill.

Phase I-West effluent shall be discharged to the Little Spokane River and the Highway 2 pipeline crossing shall be sized to accommodate anticipated Phase II flows. The Consultant shall evaluate the potential cost savings of sizing other Phase I pipeline components for Phase II flow, and shall submit recommendations to the County based on this evaluation.

East System

The Consultant shall employ a combination of air rotary and cable tool drilling techniques for the installation of monitoring and pilot wells for construction of the Phase II-East pilot system. Initially, the Consultant shall install multiple completion monitoring wells at the four approximate locations shown on Figure IV-2 of the Scope of Work. However, site access and the results of the upper aquifer preliminary evaluation may impact the location of some of these wells. Monitoring wells at each monitoring well location shall be constructed in clusters (a single well in each boring). The deepest well in each cluster

shall be constructed first, using a combination of air rotary and cable tool drilling techniques. The Consultant shall employ air rotary drilling techniques (conventional) for approximately the first 80 feet, and then complete the remainder of the boring using cable tool methods. The casing shall be sealed and down-sized within the lacustrine unit (if present). The boring shall then be advanced and driven soil samples collected at approximate 5-foot intervals to obtain accurate stratigraphic information.

The additional borings within each well cluster shall be advanced using air rotary drilling techniques based on the stratigraphic information obtained from the initial boring. These initial monitoring well clusters shall be constructed, developed, and sampled in a similar manner to that described for the south and west systems. Chemical analyses shall also be similar, although additional parameters commonly associated with landfill leachate shall also be analyzed for from at least one of the monitoring wells.

The Consultant shall design and construct the two pilot wells and associated additional monitoring wells (if required) based on the stratigraphic, geohydrologic, and chemical data obtained from the initial monitoring wells; these additional monitoring wells (if required) are not included in the present SOS. Additional monitoring wells (if necessary) shall be constructed in the same manner as described for the initial monitoring wells. The Consultant shall construct the pilot wells using air rotary drilling techniques (Odex) based on the stratigraphic and geohydrologic data obtained from the closest cluster of monitoring wells.

The Consultant shall bury pipelines from the Phase I-East pilot wells to the treatment facility for protection against cold weather and vandalism. Treatment for Phase I-East pilot studies shall be accomplished using air stripping. A combined Phase I-East/West treatment facility shall be located within the landfill site or on property adjacent to the landfill, if available.

The Consultant shall accomplish air monitoring in conjunction with Phase I-East pilot study operations. The air monitoring system shall consist of two major components: 1) meteorological data collection, and 2) air quality sampling; the air quality sampling network shall operate during Phase I-East pilot studies only. The Consultant anticipates that the meteorological station will consist of a pole-mounted temperature, wind speed, and direction sensing assembly hardwired to a secure box containing a data logger and battery power source. The air sampling network shall consist of a minimum of three sampling stations, each using adsorption tubes to capture the volatile organics for analysis in a fully certified laboratory. The Consultant shall use a minimum of three sampling stations, including: one station upwind to provide the background and laboratory analytical check simultaneously; one sampling station to provide the stripping tower plume samples; and one station to provide downwind samples. The sampling station orientation shall be based on available wind rose data (Spokane and Deer Park airports) for the season of operation, and data developed from the onsite meteorological station.

The Consultant shall discharge Phase I-East effluent to the Little Spokane River. The Consultant shall evaluate the possibility of sizing some of these Phase I-East pipelines for Phase II flow during final Phase I design and provide a recommendation to the County.

PHASE I PILOT STUDY OPERATION

As described in the Scope of Work, Phase I operations for each system are expected to require at least one month of operation. Pumping tests for the Phase I-South, -East, and -West systems shall be accomplished by the Consultant to evaluate hydrogeologic parameters and pumping well efficiencies. The Consultant anticipates accomplishing both constant flow rate and step drawdown pumping tests to obtain the data required for Phase II interception system design. Water level data shall be collected from the two nearest monitoring wells and the pumping well (at least for step drawdown testing), and from appropriate domestic wells (provided site access is granted).

As specified in the Scope of Work, the Consultant shall collect ground water samples from the pilot well and the two closest monitoring wells weekly during the first four weeks of operation of the pilot study. Should the pilot study extend beyond four weeks, the Consultant shall collect additional samples on a quarterly basis. Sampling beyond the first four weeks is not included in the present SOS. These samples shall be analyzed for the same constituents as the initial samples collected following monitoring and pilot well construction. The

Consultant shall collect and analyze samples of treatment effluent on a weekly basis.

The Consultant shall accomplish air stripping treatability studies as part of Phase I operations. The data collected for treatability study input shall include:

- o The influent and effluent laboratory analyses, and
- o The daily operating log sheets used to record the operating conditions of the air stripper for all test periods.

PHASE I PROGRESS REPORTS

The Consultant shall prepare Phase I progress reports for review by the County and submittal to the EPA. These progress reports shall be prepared monthly during periods of construction and quarterly thereafter, and shall describe activities accomplished since the previous progress report, activities anticipated for the next reporting period, and any problems encountered or anticipated in commencing or completing these activities.

EVALUATION OF PHASE I DATA

The Consultant shall evaluate the data collected during the Phase I pilot studies to develop the design parameters required for Phase II Remedial Design. The Consultant shall analyze pumping test data to determine the geohydrologic parameters required for the interception systems (south and west) and the extraction system (east) design, for sizing of pipelines, and to evaluate the flow capacity requirements for the treatment system(s). Ground water monitoring chemical results shall be evaluated to assist in the proper location of the interception and extraction systems, and for contaminant mass flux estimates

for treatment system design and air modeling (per Section V.D. of the Scope of Work). Chemical analyses of treatment system influent and effluent, and treatment system operations data, shall be used in treatability studies for stripping tower design.

The Consultant shall use the air monitoring data collected during Phase I-East pilot studies to re-evaluate the need for Phase II air emissions abatement. This re-evaluation procedure shall include:

- o Rerunning the air dispersion model using the onsite meteorological station data. If agreement between model and field data is poor, then a new model shall be selected;
- o Compiling and comparing both the background (upwind) and pilot plant affected (downwind) air quality data to the model predictions and air stripper mass balance;
- o Calculating exposed population risk to volatile organic compounds; and
- o Comparing calculated to allowable risk.

The Consultant shall prepare a Phase I engineering report that:

- o Describes the activities accomplished during Phase I;
- o Presents data collected during these Phase I activities;
- o Describes the methods used to analyze the Phase I data and the results of these analyses;
- o Presents conclusions resulting from the Phase I activities and subsequent data analysis; and
- o Assesses the impact of these conclusions on the selected remedial approach.

The Consultant shall prepare this report for the review and approval of the County and subsequent submittal to the regulatory authorities for their review.

PHASE II REMEDIAL DESIGN

The Consultant shall develop the Phase II remedial design based on the data and design parameters developed during Phase I activities and other available data from the RI and domestic well monitoring. The Phase II interception systems (south and west) and Phase II source control (extraction) system (east) shall be designed utilizing the geohydrologic and chemical data obtained during Phase I. The south and west interception systems shall be designed using capture zone analyses as specified in the Scope of Work. The Consultant shall develop a ground water flow model to assess interferences between the east and west extraction and interception systems, the impact of the remedial action on adjacent domestic well usage, and as a possible tool to determine the criteria for institutional controls. The selected ground water flow model shall be such that it may be coupled with a contaminant transport model if necessary.

The treatment system(s) shall be designed using the Phase I chemical data and treatability analyses and anticipated inflows based on interception system and extraction system design. The Consultant shall further evaluate the economics of a combined treatment facility for the south, west, and east systems and provide a final recommendation to the County. The Consultant shall also design and estimate the costs for all Phase II

discharge systems and outfalls, including the energy recovery system (hydropower generation), associated with discharge to the Little Spokane River.

The Consultant shall develop the following Phase II work plans as part of the preliminary remedial action design for Phase II:

- o Phase II Extraction Well Plan;
- o Phase II Ground Water Monitoring Plan; and
- o Phase II Treatment and Discharge Plan.

These work plans shall present the basic design for each of the remedial components, but will not include the level of detail that will be set forth in the plans and specifications. The Consultant shall submit preliminary and final drafts of these work plans to fulfill the 30 percent and 60 percent design submittal requirements, respectively.

The Consultant shall also prepare the procedural work plan components, including:

- o QA/QC Plan;
- o Health and Safety Plan;
- o Data Management Plan; and (if required)
- o Community Relations Plan.

Following completion of the work plans and subsequent review and approval by the government plaintiffs, the Consultant shall prepare the plans and specifications for the Phase II remedial action. These plans and specifications shall address all the remedial action components described in the Phase II work plans, and shall be submitted for review and approval at the 90 percent

design completion stage. The Consultant shall also prepare an operations and maintenance (O&M) plan in conjunction with development of the plans and specifications and submit this plan with the 90 percent completion plans and specifications. This operations and maintenance plan shall describe:

- o Description of equipment;
- o Normal operations and maintenance;
- o Potential operating problems;
- o Routine monitoring and laboratory testing;
- o Alternate O&M;
- o Safety plan;
- o Records and reporting requirements; and
- o Annual O&M budget.

After completion of the final drawings and specifications, a construction cost estimate and O&M cost projection shall be prepared.

ATTACHMENT B

COLBERT LANDFILL REMEDIAL DESIGN/REMEDIAL ACTION ESTIMATED COST BUDGET ENGINEERING SERVICES

Total Project

Estimate for Scope of Services defined in Section III of Agreement for the period of 1989 through 1992.

Consultant Labor at Direct Payroll Cost	\$ 673,000	
Consultant Overhead (161%)	\$1,083,500	1756.5
Rebillable Expense and Equipment	\$ 704,300	
Major Subcontractor	\$ 958,000	

Cost Subtotal	\$3,418,800	
Contingency (Approx. 15%)	\$ 498,300	
Consultant's Fixed Fee	\$ 382,900	2438.00

Project Total	\$4,300,000	

Summary By Task

I. Overall Project Management	\$ 109,700
II. Phase I Plans/Design	\$ 293,000
III. Pilot Study Construction	\$1,775,000
IV. Pilot Study Operation	\$ 404,000
V. Phase I Data Evaluation	\$ 109,000
VI. Reports	\$ 140,000
VII. Phase II Work Plans	\$ 451,000
VIII. Phase II Design, Plans and Specs	\$ 520,000

Subtotal	\$3,801,700
Contingency (15% of Cost)	\$ 498,300

Project Total	\$4,300,000

* The estimated cost budgets are based on and subject to the assumptions and qualifications in the attached notes.

COST SUMMARY NOTES

SPECIFIC NOTES

I. Overall Project Management

- o Overall - contracting, coordination.
- o Fifteen man-trips to Spokane.

II. Phase I Plans/Design

Work Plans

- o Task coordination, administration, and communication/computer equipment.
- o Based on existing Consent Decree Scope of Work.
- o Five man-trips to Seattle by subconsultants for meetings.
- o Six man-trips to Spokane for meetings.
- o Includes some input by public relations subconsultant.
- o Six copies of each draft and 15 copies of each final work plan for distribution.
- o Assumes one round of work plan revisions.

Design

- o Two site facility plans.
- o Details for 4 pilot wells.
- o Details for 11 monitoring well locations, including clustered wells at some locations.
- o Details for piping from well heads to stripping tower, including one drawing.
- o Seven drawings for pilot treatment plant and site development.
- o Nine drawings for piping plan, highway crossing, and discharge point; total of about 6,200 lineal feet of collection and discharge piping.

Upper Aquifer Verification

- o Well depth determination of 17 existing wells.
- o Elevation survey for 12 existing wells.
- o Ground water level measurements in 30 existing wells.

Authorizations

- o County to arrange property access. Consultant to provide boundary and right-of-way survey.
- o County to prepare and apply for pilot study permits. Consultant to provide general technical input.

III. Pilot Study Construction

- o Ten man trips for mobilization and management of construction.
- o Includes some input by public relations subconsultant.
- o Includes arranging for construction contractors and drillers.
- o Mobilization to site.
- o Move in office trailer, utility hookup; 18 month lease.
- o Drilling and construction of wells at 4 pilot and 11 monitoring locations for a total of 31 wells. Assumes maximum drilled depths of 350 feet, 280 feet, and 100 feet for west, east, and south wells, respectively.
- o Drilling for period of April through November. Extra costs will be incurred for winter activities.
- o Includes health and safety equipment during well construction.
- o Assumes no requirements for special handling of drilling cuttings or water.
- o Location and elevation survey of all new monitoring wells.
- o Site preparation, utilities, fencing construction for water treatment and air monitoring facilities.

- o Stripping tower site construction.
- o Water sampling for 31 new and 14 existing wells and chemical analyses.

IV. Pilot Study Operation

- o Includes input from public relations subconsultant.
- o Pump test at each pilot well, 4 weeks duration each, including pump and operation.
- o Installation of bladder pumps in 20 monitoring wells.
- o Rental of single 100 gpm stripping tower for 4 months.
- o Chemical analysis of stripping tower discharge at once per week during four 1-month tests.
- o Chemical analysis of samples from up to 20 monitoring and pilot wells during pilot tests.
- o Air quality monitoring for 2 months before and 1 month during operation of east pilot system. Data collection 3 times per month.
- o Meteorologic data for 12 to 18 months during Phase I activity. Data collection once per month.

V. Phase I Data Evaluation

- o Data evaluation and development of design parameters for Phase II extraction systems, water treatment system(s), and pipelines.
- o Air modeling for evaluation of off gas treatment requirements (if any).
- o No meetings planned.

VI. Reports

- o Monthly progress reports through Phase I construction, quarterly thereafter (5 copies each).
- o Progress report scope limited to that described in Section XI.A. of the Colbert Landfill Consent Decree.
- o Includes 6 copies of draft and 10 copies of final Phase I Engineering Report.
- o No meetings planned.

VII. Phase II Work Plans

- o Includes 6 man-trips.
- o Assumes 6 agency meetings to agree on plume interception and extraction system design and water treatment requirements.
- o Includes printing of 12 review sets of work plan drafts.
- o Assumes draft and final work plans constitute 30 and 60 percent design submittals, respectively.
- o Includes Health and Safety, QA/QC, monitoring well, and community relations work plan updates.
- o Includes development of Extraction Well, Treatment and Discharge, and Data Management Work Plans.
- o Includes ground water flow model as part of extraction system design.

VIII Phase II Design, Plans and Specifications

- o Includes 12 man-trips of team for review of drawings.
- o Includes printing of 12 review sets for 2 reviews each and 12 final sets of drawings.
- o Facilities design includes preparation of about 40 total drawings.
- o Includes printing of 8 copies of O&M plan, with 2 man-trips during final preparation.
- o Includes review of critical design elements by Engineering Technical Review Board.

Authorized pursuant to Resolution No. M-2a
88-1278AMENDMENT NO. 1 TO AGREEMENT BETWEEN
LANDAU ASSOCIATES, INC.
AND SPOKANE COUNTY

This Amendment, made and entered into this 26 day of ^{March}~~January~~, 1990, by and between Spokane County, a political subdivision of the State of Washington, having offices for the transaction of business at West 1116 Broadway Avenue, Spokane, Washington, hereinafter referred to as the "County", and Landau Associates, Inc., having offices for the transaction of business at 23107-100th Avenue West, P.O. Box 1029, Edmonds, Washington, 98020-9129, a Washington corporation, hereinafter referred to as the "Consultant".

This Amendment modifies the Agreement to Perform Engineering Services for Remedial Design/Remedial Action (RD/RA) for Colbert Landfill, Spokane County, Washington (hereinafter "Agreement") between said Parties dated March 21, 1989.

R E C I T A L S

A. The Agreement is ambiguous in that it provides for the utilization of contingency funds to pay for a change or increase in the scope of services without amending the Agreement, but requires an amendment for any change in the fixed dollar fee.

B. The Fixed Dollar Fee in the Agreement includes an amount budgeted for business occupation taxes and professional liability insurance costs which exceed the Consultant's normal Overhead, based on the Estimated Cost Budget. However, the Consultant should additionally be reimbursed to the extent said costs exceed the amounts budgeted therefore in the Fixed Dollar Fee.

NOW, THEREFORE, in consideration of the above recitals and the amendatory terms and conditions which follow, the Agreement is amended as follows:

A M E N D M E N T

Section VI, Paragraph A, subparagraph (2) shall be amended to read as follows:

"The Fixed Dollar Fee of Three Hundred Eighty-Two Thousand Nine Hundred and no/100 Dollar (\$382,900.00) may not be increased except for changes in the scope of services or performance of the Consultant. Increases in the Fixed Dollar Fee shall require a formal amendment to the Agreement executed beforehand; provided, a formal amendment shall not be required if the increase in the Fixed Dollar Fee is compensated through the use of contingency funds."

Subparagraph (4) is added as a new section to Section VI, Paragraph A, as follows:

"In the event that the Scope of Services of the Consultant is reduced in any substantial manner, the Parties shall negotiate a fair and equitable reduction in the Fixed Dollar Fee and the Maximum Price. A formal amendment to the Agreement shall not be required."

Subparagraph (5) is added as a new section to Section VI, Paragraph A, as follows:

"The Consultant shall make reasonable efforts to notify the County when it appears that the estimated budget for a particular scope item will be exceeded and to what extent. The Consultant shall also notify the County when the Estimated Cost Budget has been exceeded."

Section VI, Paragraph E, is amended by adding the following language:

"Direct Expenses shall also include business and occupation tax and professional liability insurance costs incurred by the Consultant in excess of normal Overhead, except to the extent that such costs were budgeted for in the Fixed Dollar Fee. The Consultant may estimate such excess costs after its completion of Phase I services by comparing budgeted versus incurred amounts in the general cost categories which generate such costs (i.e. rebillables, equipment, subcontractor/subconsultant cost categories). A final accounting shall be made after the Consultant has completed its services under the Agreement and any amendments thereto."

IN WITNESS WHEREOF, the Parties hereto have caused this Amendment to be executed by their authorized representatives or officers as of the day and year first set forth above.

SPOKANE COUNTY:

BOARD OF COUNTY COMMISSIONERS
OF SPOKANE COUNTY, WASHINGTON


Patricia A. Mummey


Steven Hasson


John R. McBride

ATTEST:

WILLIAM E. DONAHUE,
Clerk of the Board

By


Deputy Clerk

CONSULTANT:

LANDAU ASSOCIATES, INC.

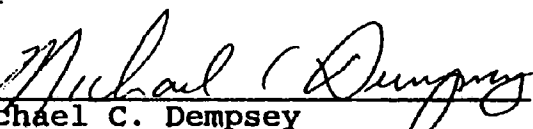
By Robert G. Fulton 3/26/90
Signature Date

ROBERT G. FULTON
Type or Print Name

VICE PRESIDENT
Title

600 557 469 000
Washington State Certification
of Registration Tax Number
(Department of Revenue)

Approved as to Form:


Michael C. Dempsey
Deputy Prosecuting Attorney

129000

No. 93 0609

BEFORE THE BOARD OF COUNTY COMMISSIONERS
OF SPOKANE COUNTY, WASHINGTON

II THE MATTER OF AMENDING THE)	
THE AGREEMENT WITH LANDAU)	
ASSOCIATES, INC. FOR ENGINEERING)	R E S O L U T I O N
SERVICES FOR THE REMEDIAL DESIGN/)	
REMEDIAL ACTION AT THE COLBERT)	
LANDFILL SITE)	

WHEREAS, pursuant to the provisions of the Revised Code of Washington, Section 36.32.120(6), the Board of County Commissioners of Spokane County has the care of County property and the management of County funds and business; and

WHEREAS, pursuant to Resolution No. 88 1278, the Board designated Landau Associates, Inc. as the most highly qualified engineering firm to perform the remedial design/remedial action at the Colbert Landfill site; and

WHEREAS, pursuant to Resolution No. 89 0266, Spokane County entered into an agreement with Landau Associates, Inc. to provide professional engineering services respecting Phase I Remedial Design, Phase I Remedial Action and Phase II Remedial Design for the Colbert Landfill site; and

WHEREAS, in March, 1990, the Board executed an amendment to the above agreement clarifying and revising said agreement in certain particulars; and

WHEREAS, Landau is near completion of the services provided for in the above agreement plus additional scope items approved by the County Public Works Director; and

WHEREAS, County Utilities has negotiated compensation with Landau for the additional scope items on the basis of cost plus a sixteen percent (16%) fee; and

WHEREAS, the cost of the original scope items in the agreement will be completed for less than the amount budgeted therefore, but the amount budgeted for new scope items will exceed the contingency amount and the Maximum Price provided for in the agreement; and

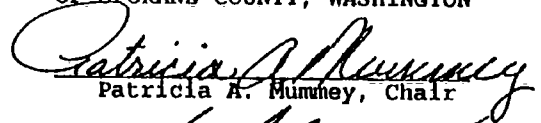
WHEREAS, County Utilities has requested that the Maximum Price listed in the agreement be increased from \$4,300,000.00 to \$4,550,000.00 to cover the estimated costs of Landau's service, and that the agreement be amended to increase the Fixed Dollar Fee and contingency fund in a sufficient amount to fully compensate Landau as provided for in the agreement and as negotiated by County Utilities;

NOW, THEREFORE, BE IT RESOLVED that the undersigned Board be authorized to execute Amendment No. 2 to the agreement entered into with Landau Associates, Inc. under Resolution No. 89 0266; pursuant to which amendment the Maximum Price listed in the agreement shall be increased from \$4,300,000.00 to \$4,550,000.00; and pursuant to which the Fixed Dollar Fee and contingency fund shall be increased in a sufficient amount to fully compensate Landau for the original scope of services, as provided for in the agreement (as amended), and for new scope items, as negotiated by County Utilities.

93 0609

PASSED and ADOPTED this 1st day of June, 1993.

BOARD OF COUNTY COMMISSIONERS
OF SPOKANE COUNTY, WASHINGTON


Patricia A. Mumney, Chair


Steven Hasson


D. E. Chilberg

ATTEST:

WILLIAM E. DONAHUE
Clerk of the Board

By 
Deputy Clerk

124001-10
111-2a Spokane County
Authorized pursuant to Resolution No.

93 0609

AMENDMENT NO. 2 TO AGREEMENT BETWEEN
LANDAU ASSOCIATES, INC.
AND SPOKANE COUNTY

This Amendment, made and entered into this 1 day of June, 1993, by and between Spokane County, a political subdivision of the State of Washington, having offices for the transaction of business at West 1026 Broadway Avenue, Spokane, Washington, hereinafter referred to as the "County", and Landau Associates, 100th Avenue West, P.O. Box 1029, Edmonds, Washington 98020-9129, a Washington corporation, hereinafter referred to as the "Consultant".

This Amendment modifies the Agreement to Perform Engineering Services for Remedial Design/Remedial Action (RD/RA) for Colbert Landfill, Spokane County, Washington, hereinafter referred to as "Agreement" between said Parties dated March 21, 1989.

W I T N E S S E T H

WHEREAS, the Parties desire to amend the Agreement's Scope of Services, Part III and the Compensation and Terms of Payment, Part VI.

NOW, THEREFORE, in consideration of mutual consent and desire, the Agreement is amended as follows:

A M E N D M E N T

Attachment A, Colbert Landfill Remedial Design/Remedial Action Scope of Engineering Services shall be amended to include the scope as described in Attachment A of this Amendment.

Section VI, Paragraph A, subparagraph (1) shall be amended to read as follows:

"For those services enumerated in Section III above, the Consultant shall be paid its Direct Payroll Cost, Overhead, Direct Expenses, and a Fixed Dollar Fee. An Estimated Maximum Total Amount has been established in the sum of Four Million, Five Hundred Fifty Thousand Dollars (\$4,550,000), which shall not be exceeded without formal amendment to this Agreement. This Maximum Price includes an increase in the Fixed Dollar Fee and Contingency.

IN WITNESS WHEREOF, the Parties hereto have caused this Amendment to be executed by their authorized representatives or officers as of the day and year first set forth above.

SPOKANE COUNTY:

BOARD OF COUNTY COMMISSIONERS
OF SPOKANE COUNTY, WASHINGTON

Patricia A. Mumme
Patricia A. Mumme

Steven Hasson
Steven Hasson

D.E. Chilberg
D.E. Chilberg

ATTEST:

WILLIAM E. DONAHUE,
Clerk of the Board

By Shanna Montague
Deputy Clerk

CONSULTANT:

LANDAU ASSOCIATES, INC.

By Larry Beard 7/6/93
Signature Date

Lawrence D Beard
Type or Print Name

Project Manager
Title

600 557 469 1
Washington State Certification
of Registration Tax Number
(Department of Revenue)

Approved as to Form:

Michael C. Dempsey
Michael C. Dempsey
Deputy Prosecuting Attorney

TABLE 1

COLBERT LANDFILL RD/RA
PHASE II COST ESTIMATE FOR NEW SCOPE ITEMS (a)

TASK NO.	TASK NAME	Unit Rate (\$/day) (b)						Total Days	Total (b) \$	Nonlabor (\$)				Total Nonlabor	TOTAL COST (NO FEE)
			Sr.Princ	Sr	Sr.Stf	Draft	Supp			Rebl	Eqpt	Subcontr. (c)	Sverdrup		
			\$1,732	\$703	\$434	\$366	\$299								
77	Bench Scale Testing		0.5	5.0	8.0	0.0	2.0	15.5	\$8,451	\$200	\$300	\$2,000	\$0	\$2,500	\$10,951
78	NPDES Assistance		1.0	20.0	5.0	0.0	3.0	29.0	\$18,859	\$1,000	\$0	\$5,000	\$0	\$6,000	\$24,859
80	Scale Control Design		2.0	75.0	45.0	25.0	5.0	152.0	\$86,364	\$1,000	\$4,000	\$0	\$58,800	\$63,800	\$150,164
	Total		3.5	100.0	58.0	25.0	10.0	196.5	\$113,674	\$2,200	\$4,300	\$7,000	\$58,800	\$72,300	\$185,974
														FEE (d)	\$27,596
														GRAND TOTAL	\$213,570

(a) Cost estimate based on and subject to the assumptions and qualifications in the attached notes.

(b) Includes direct salary and overhead.

(c) Laboratory analyses.

(d) 16% fee on Landau and Sverdrup direct labor and overhead.

F:\PROJECTS\COLBERT\AUTH-BUD.WK1



LANDAU
ASSOCIATES,
INC.

Geoenvironmental Engineering and Technologies

June 5, 1992

Mr. Dean Fowler
Spokane County Utilities Department
N 811 Jefferson Street
Public Works Building, 1st Floor
Spokane, WA 99260-0170

RE: COLBERT LANDFILL RD/RA
AUTHORIZATION FOR ADDITIONAL SERVICES
PHASE II DESIGN AND NPDES ISSUES

Dear Dean:

This letter describes additional Phase II costs related to design of the scale control system for the Phase II treatment facility, and addresses National Pollutant Discharge Elimination System (NPDES) issues for the Colbert Landfill RD/RA Project. As identified in our May 8, 1992 memorandum, the control of calcium carbonate scale accumulation is required for the Phase II treatment facility. Also, a number of NPDES issues were raised by the Washington State Department of Ecology (Ecology) that must be addressed as part of the Phase II design process. Scale control design and NPDES permitting are not included in Landau Associates' present scope of services, and constitute new scope. As we discussed, the cost for these new scope items will be paid from the Project Contingency Fund.

Scale control design includes design of the selected scale control alternative, which includes acid batch cleaning, acid addition, and sequestering agent addition. Phase II design components for this scale control alternative include preparation of Phase II work plans, plans and specifications, and operations and maintenance manual sections related to the scale control processes. At the County's request, the scale control system will be designed such that construction of the acid addition process can be accomplished subsequent to initial construction (Approach No. 4 in Landau Associates' May 8, 1992 technical memorandum).

Bench scale testing of phosphate and nonphosphate sequestering agents, and additional acid addition testing, will be performed concurrently with Phase II design. The purpose of the bench scale testing is to evaluate the performance of sequestering agent addition for scale control compared to that of acid addition. As identified in our May 8, 1992 memorandum, it is unlikely that bench scale testing will demonstrate conclusively that sequestering agent addition without acid addition will be adequate for Phase II scale control. However, bench scale testing

CU05707

may identify that sequestering agent addition is an ineffective scale control process for air stripping, allowing elimination of sequestering agent addition from the Phase II treatment process and implementation of acid addition during initial Phase II treatment facility construction.

Ecology comments on the Preliminary Phase II Treatment and Discharge Plan identified an extensive list of ambient water quality criteria for NPDES monitoring of Phase II effluent discharges. The list of constituents identified by Ecology includes many that have not been previously tested for at the Colbert Landfill site. Resolution of these Ecology comments will require extensive correspondence and negotiation with Ecology, and may require additional sampling and analyses of surface water and groundwater, significant revision to the Phase II Treatment and Discharge Plan, and potentially significant expansion of the Quality Assurance Project Plan (QAPjP). The scope of services required to address these NPDES issues is highly dependent on the results of negotiations with EPA and Ecology and cannot be accurately defined at this time. We recommend establishing a preliminary budget to assist the County in negotiations with the regulatory agencies, and to perform surface water and groundwater sampling, analyses, and data evaluation. The final budget (and cost) for these services will depend on the final (as yet undetermined) scope resulting from regulatory agency negotiations.

Until these issues are resolved, it is not possible to determine the impact NPDES monitoring requirements will have on the QAPjP, or other documents that address Phase II sampling and analysis requirements. Additionally, there is some potential that NPDES requirements could cause a change in the treatment facility design or location of discharge for the Phase II system. The present scope (and associated costs) are intended to address NPDES issues through development of the monitoring requirements. Associated changes to Phase II design and/or operational documents (if needed) will be addressed as a separate scope item.

Services for these tasks will be provided on a time and expense basis, plus a percentage fee, using rates similar to those used for our Basic Agreement. This equates to a 161 percent overhead factor applied to the direct salary costs of Landau Associates, Inc. and Sverdrup Corporation, and a 16 percent fee applied to those combined direct salary and overhead costs. An administrative fee will not be applied to subcontractor and billable expenses. The estimated cost for our services are presented below:

Task	Estimated Cost ^(a)
Scale control design (124-01.80)	\$173,400
Bench Scale Testing (124-01.77)	\$ 12,300
NPDES Permitting Assistance ^(b) (124-01.78)	<u>\$ 27,900</u>
Total	\$213,600

(a) Includes fixed fee.

(b) Approximately \$3,500 of this budget was expended for initial evaluation of Ecology NPDES comments.

The estimated costs are detailed on Table 1.


In the event that Project requirements change or unforeseen conditions are encountered which warrant additional services beyond the agreed scope of services and costs, we will bring these to your attention and seek your approval for an addendum to the scope of service and costs.

Landau Associates recommends tracking costs for these tasks under the task numbers identified in the preceding estimated breakdown. As noted, the scale control design budget will be incorporated into the existing task number for plans and specifications, but bench scale testing and NPDES assistance will be tracked as separate tasks.

Written authorization for these new scope items can be executed by returning this letter to Landau Associates after it has been signed by Dennis Scott. Please return one copy of this letter with your authorization and retain the other for your files. If you have any questions, or wish to use a different authorization method, please contact me.

LANDAU ASSOCIATES, INC.

By:



Lawrence D. Beard, P.E.
Project Manager

LDB/sg
No. 124001.70
Attachment - Cost Estimate Notations

AUTHORIZATION

Landau Associates, Inc. is authorized to proceed with the new scope items described herein. Task charges will be billed to the task numbers identified in this document, and will be reimbursed on a time and expense basis subject to the terms and conditions described herein, and in accordance with the Basic Agreement.

Spokane County Public Works Director

By  6-10-92
Dennis M. Scott, P.E. Date

LDB/sg
Colbert Landfill RD/RA
Authorization for Additional Services
Phase II Design and NPDES Issues
(Task No. 124001 70/80)

COLBERT LANDFILL RD/RA
PHASE II DESIGN—NEW SCOPE ITEMS
COST ESTIMATE NOTATIONS

I. Bench Scale Testing

- Includes groundwater sample collection for use in testing
- Includes up to a total of 8 bench scale tests for acid addition (2), nonphosphate sequestering agent (3), phosphate sequestering agent (2), and 1 untreated control sample
- Includes laboratory analyses for selected chemical parameters for 1 background sample, and samples from the 8 bench scale tests
- Includes data evaluation and preparation of a technical memorandum describing bench test results.

II NPDES Assistance

- Up to 15 person-days for assistance in addressing NPDES issues, including meeting attendance, preparation of correspondence, and data evaluation
- Includes collection of 1 groundwater sample and 1 surface water sample (Little Spokane River) for laboratory analyses
- Includes up to \$5,000 for laboratory analyses.

III Scale Control Design

- Includes design of acid addition, sequestering agent addition, and acid batch cleaning scale control processes for the Phase II treatment facility
- Design products consist of Phase II treatment and discharge plan, plans and specifications, and Operations and Maintenance Manual
- Assumes up to 22 design drawings and associated specifications related to scale control

BEFORE THE BOARD OF COUNTY COMMISSIONERS
OF SPOKANE COUNTY, WASHINGTON

IN THE MATTER OF EXECUTING)
AN AGREEMENT FOR ENGINEERING)
SERVICES WITH LANDAU ASSOCIATES,)
INC., IN CONJUNCTION WITH PHASE)
II REMEDIAL ACTION AT THE)
COLBERT LANDFILL SITE)

R E S O L U T I O N

WHEREAS, pursuant to the provisions of the Revised Code of Washington, Section 36.32.120(6), the Board of County Commissioners of Spokane County has the care of County property and the management of County funds and business; and

WHEREAS, pursuant to Resolution No. 88-1278, the Board designated Landau Associates, Inc. as the most highly qualified engineering firm to perform the remedial design/remedial action at the Colbert Landfill site; and

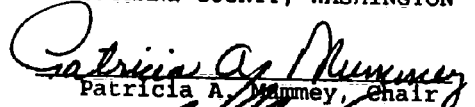
WHEREAS, pursuant to Resolution No. 89-0266, Spokane County entered into an agreement with Landau Associates, Inc. to provide professional engineering services respecting Phase I Remedial Design, Phase I Remedial Action and Phase II Remedial Design for the Colbert Landfill site; and

WHEREAS, the Spokane County Division of Utilities has negotiated a contract with Landau to provide construction management services for the Colbert Landfill Phase II Remedial Action to Spokane County for an estimated maximum expense of \$1,251,035; and


NOW, THEREFORE, BE IT RESOLVED that the undersigned Board execute with the Agreement to Perform Engineering Services for Phase II Remedial Action for the Colbert Landfill RD/RD Project, pursuant to which Landau Associates, Inc. will provide construction management professional engineering services for the Colbert Landfill Phase II Remedial Action to Spokane County for an estimated maximum expense of \$1,251,035.

PASSED and ADOPTED this 11th day of August, 1992.

BOARD OF COUNTY COMMISSIONERS
OF SPOKANE COUNTY, WASHINGTON


Patricia A. Mumme, Chair


Steven Hanson


John R. McBride

ATTEST

WILLIAM B. DONAHUE
Clerk of the Board

By 
Deputy Clerk

32 1129

**AGREEMENT TO PERFORM
ENGINEERING SERVICES
FOR
PHASE II REMEDIAL ACTION
COLBERT LANDFILL RD/RA PROJECT
SPOKANE COUNTY, WASHINGTON**

<u>Section</u>	<u>Subject</u>	<u>Page</u>
I	INCORPORATION OF RECITALS AND CONSENT DECREE	2
II	CONTRACT DOCUMENTS	2
III	SCOPE OF SERVICES	3
IV	CRITERIA AND CONDITIONS	3
V	TIME OF BEGINNING AND COMPLETION	4
VI	COMPENSATION AND TERMS OF PAYMENT	5
VII	COMPLIANCE WITH LAW	7
VIII	SUBLETTING OR ASSIGNING OF WORK	9
IX	LEGAL RELATIONS	9
X	TERMINATION OF AGREEMENT	12
XI	SPECIAL STIPULATIONS	13

This Agreement is made and entered into this ____ day of _____, 1992 by and between Spokane County, a political subdivision of the State of Washington, having offices for the transaction of business at West 1116 Broadway Avenue, Spokane, Washington, hereinafter referred to as the "County", and Landau Associates, Inc., having offices for the transaction of business at 23107 100th Avenue West, P.O. Box 1029, Edmonds, Washington, 98020-9129, a Washington corporation, hereinafter referred to as the "Consultant".

This agreement specifies the terms and conditions under which the Consultant will provide specified engineering consulting services to the County in support of Phase II Construction for the Colbert Landfill Remedial Design/Remedial Action (RD/RA) Project in Spokane County, Washington, hereinafter referred to as the "Project".

RECITALS

A. On January 9, 1989, the United States Environmental Protection Agency (EPA) and the Washington State Department of Ecology (Ecology) filed a complaint in U.S. District Court for the Eastern District of Washington, Cause No. C-89-033-RJM, against the County and Key Tronic Corporation (Key Tronic) under federal and state hazardous waste and "Superfund" legislation. The complaint alleges that the County and Key Tronic are liable for the release, threatened release, or disposal of hazardous substances, pollutants, or contaminants at the Colbert Landfill site, located in Spokane County, Washington.

B. On February 28, 1989, the County and Key Tronic entered into a Consent Decree with EPA and Ecology whereby the County agreed to implement the final remedial action plan set forth in the Consent Decree for cleanup of the site. The Consent Decree incorporates, by reference, Appendices A, B, C, and D. Page VIII-1 and VIII-2 of Appendix B were amended by the U.S. District Court on February 28, 1989, according to substituted language contained in Exhibit F, Supplemental Memorandum in Support of Motion for Entry of Consent Decree (filed with the Court).

C. Among other requirements, the Consent Decree:

(1) Provides for the establishment of schedules, dates, and deadlines for the various steps and requirements (including, without limitation, progress reports, work plans, and other submittals);

(2) Identifies certain performance and compliance requirements (including, with limitation, statutory and regulatory criteria, standards, regulations, guidance, and technical and procedural requirements) by which the work plans and scope of work are to be performed and accomplished;

(3) Provides for certain requisite approvals by EPA and Ecology;

(4) Establishes certain notification requirements (including timing) with regard to matters of dispute, and certain procedures for resolution of disputes arising from carrying out the requirements of the Consent Decree;

(5) Establishes certain procedures and requirements (including timing) governing requests for extensions of schedules;

(6) Provides for certain penalties for violations of the Consent Decree, including failure to make a submittal to EPA and Ecology in accordance with the Consent Decree, or to comply with any required and approved time schedule; and

(7) Provides for implementation of remedial action by EPA/Ecology, at the County's expense, upon the County's failure without good cause to comply with the Consent Decree.

D. The Consent Decree requires the County to provide a copy of the Consent Decree to each contractor or subcontractor retained to perform work contemplated by the Consent Decree, and to condition any contract for such work on compliance with the Consent Decree.

E. The Consent Decree requires that the County preserve, during the pendency of the Consent Decree and for ten (10) years from the date of its termination, all records, reports, documents, and underlying data in their possession or in the possession of their employees and agents, relevant to the implementation of the Consent Decree, unless otherwise ordered by the Court. The County is further obligated to require all such records in the possession of contractors to be provided to them and to retain copies of all records which are nonduplicative.

NOW, THEREFORE, in consideration of the mutual covenants and promises contained herein, the County and the Consultant mutually agree to the following terms, stipulations, and conditions of this Agreement, and any amendments thereto shall be binding upon both parties:

I. INCORPORATION OF RECITALS AND CONSENT DECREE

The Recitals above and the Consent Decree are incorporated by reference and made a part of this Agreement. Both parties have thoroughly reviewed the Recitals and the provisions of the Consent Decree.

II. CONTRACT DOCUMENTS

This Agreement includes and incorporates Section I-XI, Attachment 1—Scope of Services, and Attachment 2—Estimated Cost Budget, as the contract documents.

III. SCOPE OF SERVICES

This Agreement is expressly conditioned upon the performance of the Consultant's work in compliance with the Consent Decree.

The Consultant shall furnish all services and labor necessary to conduct and complete Phase II, described in Attachment 1—Scope of Services.

The Consultant may subcontract certain elements of work, including but not limited to, tasks or subtasks related to general civil, structural, and electrical aspects of the Project.

For the purpose of this Agreement, "Major Subconsultants" shall be defined as those firms or individuals retained by the Consultant to perform professional engineering and surveying services within the Scope of Services. The term "subcontractors" shall include Major Subconsultants, Major Subcontractors, and all subcontractors and subconsultants providing services within the Scope of Services.

The Consultant is the lead engineering consultant for performance of the services provided for in this Agreement, and shall retain and coordinate the work of all necessary subcontractors.

The Consultant shall ascertain such information as may have a bearing on the Project from local units of government and public and private utilities, and shall be authorized to procure information from other authorities besides the County. The Consultant shall keep the County advised as to the extent of these contacts and the results thereof.

IV. CRITERIA AND CONDITIONS

The Consultant shall have sufficient knowledge, experience, and training to apply the latest edition of applicable state and federal health and safety requirements for working at hazardous waste sites insofar as they apply to the Project.

Except as otherwise provided in this Agreement, the Consultant shall, with due diligence, furnish all necessary qualified personnel and subcontractors, materials and equipment, and manage and coordinate the same to complete the Scope of Services within the schedule established by the Consent Decree.

The Consultant shall assist the County in fully complying with pertinent requirements of the Consent Decree, in an economical, timely, and cost-effective manner for the County. The

Consultant will promptly alert the County as to matters of which the Consultant becomes aware and which require notification by the County under the Consent Decree, including, but not limited to, timely requests for extensions of time or objections to actions or decisions of EPA or Ecology, which are or may be subject to the dispute resolution provisions of the Consent Decree.

The Consultant's services shall be coordinated with the County Public Works Director (or his authorized designee), who may issue written or oral instructions regarding the Consultant's performance on the Project. Any instructions that materially affect the scope of services, price, period of performance, or any other provision of this Agreement, shall require an amendment to this Agreement executed with the same formalities as this Agreement. However, a change or increase in the Scope of Services that is compensated through the County's utilization of the contingency funds provided for in Section VI shall not require an amendment to this Agreement.

The Consultant shall ensure that a copy of the Consent Decree is provided to each Major Subconsultant retained to perform work under the Scope of Services contained in this Agreement.

As required in Appendix D of the Consent Decree, and at the request of the County and EPA, the Consultant shall, in conjunction with the County, furnish the personnel, services, documents, and materials needed to assist EPA in the collection of evidence to document work performed and costs expended by the Consultant or its subcontractors pursuant to this Agreement in order to aid cost recovery efforts by the United States. Such assistance shall include providing all requested assistance in the interpretation of evidence and costs, and providing requested testimony. All such assistance provided by the Consultant or its subcontractors, requested by the County or EPA, shall be considered extra work and shall entitle the Consultant to an equitable adjustment in compensation and other provisions of this Agreement that may be affected.

V. TIME OF BEGINNING AND COMPLETION

This Agreement shall be effective from its date of execution by the County until completion of the Scope of Services.

Established completion times for tasks may be extended due to delays attributable to the County, unavoidable delays caused by governmental action or other conditions beyond the

control of the Consultant, or by mutual consent of the County and the Consultant. The Consultant may adjust its personnel to meet required schedules, but time adjustments for completion may be made only upon written approval of the County.

The County shall have the right to review and examine the Consultant's work and products at any time. Regular progress reports shall be prepared by the Consultant, as specified in the Consent Decree and Attachment 1. Additional progress reports may be required by the County in the event of delays attributable to the Consultant.

VI. COMPENSATION AND TERMS OF PAYMENT

Compensation by the County to the Consultant shall be as follows (see Attachment 2):

A. Cost Plus Fixed Percent Fee.

(1) For those services enumerated in Section III above, the Consultant shall be paid its Direct Payroll Cost, Overhead, Direct Expenses, and a Fixed Percent Fee. An Estimated Maximum Total Amount has been established in the sum of One Million Two Hundred Fifty-One Thousand Thirty-Five Dollars (\$1,251,035), which shall not be exceeded without a formal amendment to this Agreement.

(2) A Fixed Percent Fee of sixteen percent (16%) of the actual Direct Salary Cost plus Overhead is established and may not be changed, except in the case of a formal amendment to this Agreement.

(3) The Estimated Maximum Total Amount includes a contingency fund of approximately 10 percent (10%) of the Total Estimated Cost (see Attachment 2), representing a sum of One Hundred Thirteen Thousand Seven Hundred Thirty Dollars (\$113,730). Contingency funds will be made available to the Consultant only with the written consent of the County Public Works Director, and usage shall be limited to work scope items defined by the County. Any change in the Fixed Percent Fee shall be negotiated between the Parties hereto.

B. **Estimated Maximum Total Amount.** The Consultant shall make reasonable efforts to complete the Scope of Services within the Estimated Maximum Total Amount and shall keep the County informed of the financial progress of expenditures so that the Estimated Maximum Total Amount or work effort can be adjusted if found to be necessary. The Estimated Maximum Total Amount shall not be exceeded without the County's prior written approval, and the County is not otherwise obligated to pay the Consultant for costs incurred beyond the Estimated Maximum Total Amount. When the Estimated Maximum Total Amount is increased, the Consultant's excess costs expended before such increase shall be allowable to the same extent as if such costs had been incurred after the approved increase.

C. Direct Payroll Cost. Direct Payroll Cost is the sum of the direct salaries or wages paid to the employees of the Consultant and its Major Subconsultants for work directly performed pursuant to this Agreement, exclusive of all payroll related taxes, payments, premiums, and benefits. The Direct Payroll Cost is estimated to be Three Hundred Twenty Thousand Dollars (\$320,000).

D. Overhead. Overhead is the total overhead cost applicable to the services performed by the Consultant and its Major Subconsultants (identified in Paragraph VI.C) pursuant to this Agreement. A negotiated overhead of One Hundred Seventy-One Percent (171%) of the Direct Payroll Cost shall be utilized to determine compensation to be paid by the County for all services performed by the Consultant and its Major Subconsultants (identified in VI.C) and described in Attachment 1, or compensated through use of the County's contingency fund.

E. Direct Expenses. Direct Expenses include all reasonable and necessary expenses incurred by the Consultant and its Major Subconsultants in performing the services pursuant to this Agreement, other than the Direct Payroll Cost and Overhead. Direct Expenses shall include, but are not limited to, rebillables for project purchases, travel, communications, equipment rental, printing, Consultant-owned equipment charge, and subcontractor costs.

F. Terms of Payment.

(1) The Consultant shall be paid monthly by the County for services completed pursuant to this Agreement. Invoices shall be sent to: Dean Fowler, Spokane County Utilities Department, North 811 Jefferson, Public Works Building, Spokane, Washington 99260-0170.

Invoices shall detail the employee hours, hourly payroll cost, overhead, direct expenses, and the Fixed Percent Fee.

(2) Payment shall be made to Consultant by the County within thirty (30) days after receipt by the County of the Consultant's invoice and appropriate documentation. The County shall pay interest on any overdue amounts at the rate of one percent (1%) per month, but at least One Dollar (\$1.00) per month. Payments shall not be deemed past due as to any amounts required to be withheld under state or federal law, or when the County supplies written notice that payment is being withheld because of a good faith dispute; provided that resolution of such dispute in Consultant's favor shall entitle Consultant to the interest under this subparagraph that would otherwise be due on the delinquent and unpaid amounts. Payments by the County shall first be credited to interest and then to principal.

(3) Payment shall constitute full compensation for services rendered and for all supervision, labor, supplies, materials, equipment or use thereof, and for all other incidentals necessary to complete the scope of services under this Agreement.

(4) The Consultant shall permit the County, from time to time as the County deems necessary (including after the expiration or termination of this Agreement), to inspect and

audit, at any reasonable times at the Consultant's or Subcontractors' offices, all pertinent books and records of the Consultant and any Subcontractor or other person or entity that has performed services or work in connection with or related to the Consultant's services under this Agreement, to verify the accuracy of accounting records; and shall supply the County with, or shall permit the County to make, a copy of relevant project records requested. The Consultant shall require that such inspection, audit, or copying right of the County is a condition of any subcontract, agreement, or other arrangement under which any other person or entity is permitted to perform work in connection with or related to the Consultant's services under this Agreement.

The Consultant shall keep complete and accurate time records with respect to all salaries paid, as well as complete and accurate records in accordance with generally accepted accounting practices of all other reimbursable costs and expenses for purposes of audit. These records shall be retained and made available for inspection by any authorized representative of the County, state, or federal government for a period of six (6) years after expiration or termination of this Agreement. At the end of the six (6) year period, the County shall be notified by the Consultant of the intent of the Consultant or any subcontractor to destroy or discard such records, in order to allow the County the opportunity to take possession of such records before they are destroyed.

VII. COMPLIANCE WITH LAWS

A. General Requirement. The Consultant shall perform and comply with all applicable laws of the United States and the State of Washington; and the laws and ordinances of local agencies, including the ordinances of Spokane County; and rules, regulations, orders, and directives of their administrative agencies and the officers thereof.

B. Licenses and Similar Authorizations. The Consultant shall secure and maintain in full force and effect during the term of this Agreement all required licenses, permits, and similar legal authorizations, and comply with all requirements thereof; except for any permits and licenses required of the County for construction or operation of the Project.

C. Nondiscrimination and Affirmative Action. During the performance of this Agreement, the Consultant agrees not to discriminate against any employee or applicant for employment because of race, religion, creed, color, sex, marital status, sexual orientation, political ideology, ancestry, national origin; or the presence of any sensory, mental, or physical handicap, unless based upon a bona fide occupational qualification. The Consultant will take affirmative action to ensure that applicants are employed, and that employees are treated, during employment, without regard to their creed, religion, race, color, sex, national origin; or the

presence of any sensory, mental, or physical handicap. The Consultant shall incorporate this provision into all subcontracts as a requirement of the respective subcontractor.

D. Women's and Minority Business Enterprise Utilization. During the term of this Agreement, the Consultant is encouraged to meet the following minimum goals in purchases and contracts, expressed as a percentage of the total dollars available for the purchase or contract:

Minority-owned business participation - 10%.

Women-owned business participation - 6%.

The Consultant is further encouraged to:

1. Include qualified minority and women's businesses on solicitation lists;
2. Ensure that qualified minority and women's businesses are solicited whenever they are potential sources of services or supplies;
3. Divide the total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by qualified minority and women's businesses;
4. Establish delivery schedules, where requirements of the work permit, which will encourage participation of qualified minority and women's businesses; and
5. Use the services and assistance of the State Office of Women and Minority Owned Business and the Office of Minority Business Enterprises of the U.S. Department of Commerce, as appropriate.

In the event that the County, as a result of grant or funding requirements or other reasons, subsequently requires that the Consultant meet the above goals, the County shall negotiate with the Consultant an equitable adjustment in compensation and terms of performance necessitated by the Consultant's compliance with said goals.

E. Employment. Any and all employees of the Consultant or subcontractor, while engaged in the performance of any services required by the Consultant under this Agreement, shall be considered employees of the Consultant or subcontractor and not of the County; and any and all claims made by any third party, as a consequence of any negligent act or omission on the part of the Consultant's employees or other persons while so engaged in any of the work or services provided to be rendered herein, shall be the obligation and responsibility of the Consultant.

The Consultant shall not engage, on a full- or part-time basis, or other basis during the period of the Agreement, any professional or technical personnel who are or have been at any time during the period of the Agreement in the employ of the County, except retired employees, without the written consent of the County.

VIII. SUBLETTING OR ASSIGNING OF WORK

The Consultant shall not subcontract any of the services or work covered by this Agreement or any amendment thereof without prior notification of the County.

This Agreement or any amendments thereto are not assignable by the Consultant either in whole or in part.

The Consultant may employ outside specialists to enable the Consultant to complete services as defined under Section III (SCOPE OF SERVICES) of this Agreement or any amendment thereto. Compensation for outside specialists shall be included within the Estimated Maximum Total Amount specified under Section VI (COMPENSATION AND TERMS OF PAYMENT) of this Agreement.

IX. LEGAL RELATIONS

A. Applicable Law; Venue. This Agreement shall be construed and interpreted in accordance with the laws of the State of Washington. The venue of any action brought hereunder shall be in the Superior Court for Spokane County.

B. Errors and Omissions; Correction. The Consultant shall be responsible for the professional quality, technical accuracy, and the coordination of all designs, drawings, specifications, and other services furnished by or on behalf of the Consultant under this Agreement or any Amendments thereto. The Consultant, without additional compensation, shall correct or revise any errors or omissions in the designs, drawings, specifications, and/or other Consultant services immediately upon notification by the County. The Consultant's obligations under this Subsection B shall continue after the termination or expiration of this Agreement.

C. Indemnity. The indemnification provided for in this Section IX with respect to any negligent acts or omissions during the term of this Agreement shall survive any termination or expiration of this Agreement.

The Consultant agrees to indemnify and hold harmless the County, its officers, agents, servants, and employees from and against any claim, suit, action, or liability, including expenses incident thereto (each, a "Consultant indemnified claim or liability") arising from, but not limited to, bodily injury or death (including bodily injury or death to employees of the Consultant or its subcontractors), or physical injury to or loss of use of property, arising from the negligence

or willful misconduct under this Agreement of the Consultant, its subcontractors, or their respective directors, officers, agents, servants, or employees.

The County acknowledges that the Consultant played no part in the creation or presence of Pollution Conditions (as defined below), if any, which may exist at the Site (as defined below). The County agrees that the Consultant's only involvement with the Site is to perform services in accordance with the terms of this Agreement.

The County agrees to indemnify and hold harmless the Consultant, its directors, officers, agents, servants, and employees from and against any claim, suit, action, or liability, including expenses, incident thereto arising out of services performed under this Agreement when such County-indemnified claim or liability is based on bodily injury to or death of a third party, physical injury to or loss of use of property of a third party, or cleanup costs (including studies and design) which result from Pollution Conditions (as defined below) existing at or emanating from the Site (as defined below) prior to, during, or after completion of services performed under this Agreement, except to the extent that such bodily injury or death of a third party or physical injury to or loss of use of property of a third party, or increased cleanup costs (including studies and design), is caused by the negligence or willful misconduct of the Consultant or its subcontractors, or their respective directors, officers, agents, servants, or employees.

The County agrees to indemnify and hold harmless the Consultant from any and all reasonable attorney's fees incurred by the Consultant or its subcontractors or their respective directors, officers, agents, servants, or employees incident to any third party claim or liability described in this Subsection C, if such claim or liability does not involve negligence or willful misconduct of the Consultant or its subcontractors or their respective directors, officers, agents, servants, or employees; provided further that this indemnification shall be inapplicable if such claim or liability (and the duty to defend the same) is covered under any policy of insurance required of or maintained by any indemnitee.

The foregoing obligation of each party to indemnify and hold harmless is conditioned upon: a) receipt by the indemnifying party of prompt written notice from an indemnitee of any circumstances that are likely to give rise to any claim or liability or any actual claim or liability that falls within the scope of this indemnity, b) the indemnifying party's right to conduct the defense or settlement of any action related to any such claim or liability, and c) the indemnitee's cooperation with the indemnifying party in any such defense.

For the purpose of this Section IX: a) the term "Pollution Condition" shall mean the actual or alleged existence, discharge, dispersal, release, or escape of smoke, vapors, soot, fumes, acids,

alkalis, toxic chemicals, liquids or gases, waste materials or other irritants, contaminants or pollutants into or upon land, the atmosphere, or any water course or body of ground or surface water, b) the term "Site" means the land and structures constituting the facilities of the County (specifically the Colbert Landfill) and the surrounding area or any other property designated by the County or by the Consent Decree, and c) the term "third party" excludes employees of the Consultant, their subcontractors or agents, and the County.

D. Remedies Cumulative. Rights under this Agreement are cumulative; the failure to exercise, on any occasion, any right shall not operate to forfeit such right on another occasion. The use of one remedy shall not be taken to exclude or waive the right to use another.

E. Professional Liability Insurance. The Consultant shall, at its own expense, procure and maintain in full force and effect during the term of this Agreement a policy of professional liability insurance providing coverage of at least \$1,000,000 against professional liability for errors and omissions in connection with the professional engineering services to be performed by the Consultant under this Agreement. The Consultant shall furnish evidence of such insurance to the County in such form and at such times as the County shall reasonably require. The Consultant shall maintain such professional liability coverage, if such insurance is reasonably available, for three (3) years after the termination of this Agreement, or any amendment thereto. These insurance amounts and evidence of coverage shall be required of all Major Subconsultants furnishing professional services to the Consultant.

F. General Liability Insurance. Prior to undertaking any services under this Agreement, the Consultant, at its own expense, shall obtain and file with the County evidence of a policy of general comprehensive and vehicle liability insurance. Such policies: 1) shall be subject to approval by the County as to company, form, and coverage; 2) must fully protect the County from claims and risks in connection with activities by the Consultant by virtue of this Agreement; and 3) shall name the County as additional insured. Such policies shall cover at least the following:

Comprehensive—General Liability Insurance—\$1,000,000 per occurrence, combined single limit.

Comprehensive—Automobile and Vehicle Liability Insurance—\$1,000,000 per occurrence, combined single limit (including all onsite and offsite operations; all owned, nonowned, leased, or hired vehicles).

These insurance amounts and evidence of coverage shall be required of all subconsultants and subcontractors providing site activities.

Said general comprehensive and vehicle liability insurance policies and subsequent renewals must be maintained in full force and effect at no expense to the County throughout the entire term of the Agreement and any Amendment thereto. The respective insurance policies shall state that coverage will not be canceled, suspended, or reduced in coverage or in minimal limits except after thirty (30) days written notice by certified mail has been given to the County.

G. Worker's Compensation. The Consultant shall maintain worker's compensation coverage under the Washington State Worker's Compensation Act.

X. TERMINATION OF AGREEMENT

A. Termination of Agreement for Cause. Either party may terminate this Agreement or any Amendment thereto in the event the other fails to materially perform its obligations as described in this Agreement, and such material failure has not been corrected in a timely manner after notice of breach has been provided to the nonperforming party.

B. For Reasons Beyond Control of Parties. Either party may terminate this Agreement or any Amendment thereto without recourse by the other where performance is rendered impossible or impracticable for reasons beyond such party's reasonable control, such as, but not limited to, acts of nature; war or warlike operations; civil commotion; riot; labor dispute including strike, walkout, or lockout; sabotage; or superior governmental regulation or control.

C. Termination by County for Any Reason. The County may terminate this Agreement for any reason, other than as recited in subsections A and B above, upon thirty (30) days written notice to the Consultant. In such event, the County shall pay the Consultant for all work previously authorized and performed before the termination date, including the Fixed Fee, as well as reasonable termination expenses, including reassignment of personnel, subcontractor termination costs incurred by the Consultant, and related closeout costs.

D. Notice. Notice of termination pursuant to Subsections A and B above shall be given by the terminating party to the other party at least twenty (20) days prior to the effective date of termination.

E. No Waiver of Remedies. Nothing herein shall be construed to limit the parties' remedies for material breach of contract. The County is not obligated to pay any fees or expenses which specifically involve negligent acts or omissions by the Consultant.

XI. SPECIAL STIPULATIONS

A. General. The services under this Agreement shall at all times be subject to the general review and approval of the County. The Consultant shall, periodically during the progress of the work, confer with the County and shall be subject to the direction of the County; and shall prepare and present such information and materials as may be pertinent, necessary, or as may be requested by the County to determine the adequacy of the services.

The working relationship as indicated herein shall exist at the discretion of the Public Works Director; it may be revised at any time upon written notice, at the sole discretion of the Director.

B. Contractual Relationship. This Agreement or any Amendment thereto does not constitute the Consultant as the agent or legal representative of the County for any purpose whatsoever. The Consultant is not granted any express or implied right or authority to assume or create any obligation or responsibility on behalf of or in the name of the County to bind the County in any manner or thing whatsoever.

C. Addresses for Notices and Deliverable Materials. All notices and other material to be delivered hereunder shall be in writing and shall be delivered or mailed to the following addresses:

If to the County:

Mr. Dean Fowler
Spokane County Utilities Department
North 811 Jefferson
Public Works Building, First Floor
Spokane, Washington 99260-0170

If to the Consultant:

Landau Associates, Inc.
23107 100th Avenue West
P.O. Box 1029
Edmonds, Washington 98020-9129

or such other respective addresses as either party may from time to time designate in writing.

D. Professional Services. The Consultant represents that the services furnished under this Agreement will be in accordance with generally accepted professional practices. Any estimate of cost of equipment, construction, ownership, or operation furnished by the Consultant shall be the Consultant's opinion based upon its professional judgment and experience.

E. Endorsement. The Consultant, or its subconsultants (where applicable) shall endorse all plans and specifications prepared pursuant to this Agreement.

F. Ownership of Documents. All drawings, plans, prints, specifications, field notes, and other related documents prepared or obtained by the Consultant and its subcontractors in connection with the provision of services under this Agreement are and shall be the County's property, and such material shall be delivered to the County upon request. The County agrees to indemnify and hold harmless the Consultant from and against any claims arising out of the subsequent use by the County of any documents provided under this Agreement for any purpose other than the work anticipated under this Agreement. The Consultant shall retain the original of all records, reports, documents, and underlying data generated by the Consultant for a period of ten (10) years after expiration or termination of this Agreement, and the Consultant shall also require its subcontractors to meet this same requirement on behalf of the County.

G. Strict Compliance Required. Strict compliance with the terms of this Agreement is essential for the legal disbursement of public funds, for the purposes described herein. Deviation of any sort from this Agreement terms must be authorized formally in writing. No other authority for deviation from this Agreement will be recognized as proper and official.

H. Amendments. No modification or amendment of the provisions hereof shall be effective unless in writing and signed by the parties hereto. The parties hereto expressly reserve the right to modify this Agreement, from time to time, by mutual agreement.

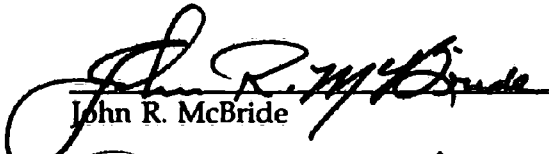
I. Executory Agreement. This Agreement will not be considered valid until executed by both the County and the Consultant.

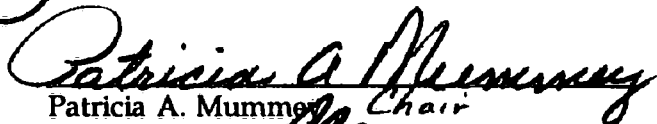
J. Binding Effect. The provisions, covenants, and conditions of this Agreement apply to bind the parties, their legal heirs, representatives, successors, and assigns.

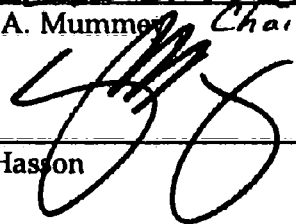
K. Severability. If any of the provisions contained in this Agreement are held, for any reason, to be invalid, illegal, or unenforceable in any respect, such invalidity, illegality or unenforceability will not affect any other provisions, and this Agreement shall be construed as if such invalid, illegal, or unenforceable provision had never been contained herein.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed on the day and year first set forth above.

BOARD OF COUNTY COMMISSIONERS
OF SPOKANE COUNTY, WASHINGTON


John R. McBride

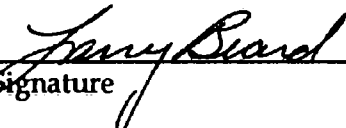

Patricia A. Mumma *Chair*


Steven Hasson

ATTEST:
WILLIAM E. DONAHUE,
Clerk of the Board

By 
Deputy Clerk

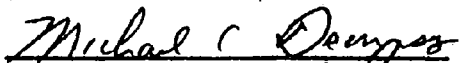
LANDAU ASSOCIATES, INC.

By  7/27/92
Signature Date

Lawrence D. Beard
Type or Print Name

Project Manager
Title

600 557 469
Washington State Certification
of Registration Tax Number
(Department of Revenue)

Approved as to Form:

Deputy Prosecuting Attorney

ATTACHMENT 1 SCOPE OF SERVICES

INTRODUCTION

This Scope of Services (SOS) presents Consultant's scope for construction management engineering services for the Colbert Landfill Phase II Remedial Action. This Remedial Action is being implemented in accordance with the Project Consent Decree Scope of Work (SOW), Appendix B of the Project Consent Decree.

Planned Phase II construction activities include installation of groundwater monitoring, extraction, treatment, and discharge systems to address contaminated groundwater in the Colbert Landfill vicinity. System components are as presented in the Final Phase II Groundwater Monitoring Plan, Extraction Well Plan, and Treatment and Discharge Plan (Landau Associates 1992 a,b,c). Facilities planned for construction include: 10 groundwater monitoring wells at 6 locations (average depth 240 ft); 10 groundwater extraction wells (average depth 200 feet); groundwater air stripping and scale control treatment systems (1,600 gpm capacity); and groundwater conveyance system piping (about 12,000 lineal ft).

The following Consultant tasks are included in this SOS:

Task Number	Task
1	Project Management
2	Assistance With Bidding
3	Assistance With Contracting
4	Shop Drawing Review
5	Construction Observation for Well Installation
6	Construction Observation for Extraction, Treatment, and Discharge System Construction
7	Groundwater Sampling
8	Assistance with Start-up Testing
9	Preparation of As-built Drawings and Final Operation and Maintenance Manual
10	Preparation of Construction Documentation Report
11	Operator Training
12	Preparation of Progress Reports

A description of these tasks is presented in the following sections of this SOS. The associated estimated Project budget is provided in Attachment 2.

TASK DESCRIPTIONS

Task 1. Project Management

Consultant shall provide Project management services, including subcontractor contracting, Project coordination, preparation of miscellaneous correspondence, regulatory agency interaction, public relations, and budget management for the anticipated duration of the Phase II construction schedule. Phase II construction activities are estimated to require 15 months, including 7 months during the design phase and 8 months following completion of design.

Task 2. Assistance With Bidding

Consultant shall prepare bid documents and coordinate bidding for the three bid packages anticipated for Project construction. These bid packages address: 1) well construction, 2) air stripping system procurement, and 3) general construction. The Consultant services associated with this task shall include preparation of three bidding requirements documents (including incorporation of standard bidding documentation used and prepared by the County); identification of candidate bidders, bidder prequalification (for drilling services only); clarifications during bid preparation; bid analysis; and recommendation of contractor selection.

The bidding requirements documents shall consist of standard bidding documentation used and prepared by the County, and Project-specific addendum prepared by Consultant. These documents will be used in conjunction with the Project design plans and specifications to develop the three bid packages. The bidding requirements documents shall include the following sections: invitation to bid, instructions to bidders, information available to bidders, bid form, and bid bond form.

Bidder identification by Consultant shall include contacting potentially qualified bidders to inform them of the upcoming Project bidding and determine their interest; the names of the interested bidders shall be forwarded to the County for consideration. Consultant shall also prepare bid advertisement for the Project. Consultant shall provide clarifications to questions received from bidders during bid preparation.

Consultant bidder prequalification for drilling services shall include preparation of a document that identifies contractor minimum requirements for personnel, training, equipment,

and experience to bid on Phase II well construction services. Consultant shall evaluate contractor qualifications and develop a contractor shortlist for bidding.

Consultant bid evaluation services shall include review of bids received for the three bid packages for bid conformance and acceptability, and recommendation of contractor selections. Brief memoranda describing bid analysis will be prepared by Consultant and submitted to the County.

This task shall include submittal of draft versions of each of the three bidding requirements documents for review by the County, and submittal of final versions following resolution of County comments. Two copies of each draft and final bid requirements document shall be submitted by Consultant.

Task 3. Assistance With Contracting

Consultant shall prepare the technical sections of the contract documents for the three contracts anticipated for Project construction, which are: 1) well drilling, 2) air stripping system procurement, and 3) general construction. The contract documents shall consist of standard contract forms prepared by the County, and Project-specific technical addendum prepared by Consultant based on the bidding. The technical addendum shall address the contractor scope of work, Project cost breakdown, and basis for payment. These documents will be used in conjunction with the Phase II design plans and specifications to make up the three contract packages. The contract forms shall include the following sections: agreement, bonding and certificate requirements, general and supplementary contract conditions, scope of work, and costs.

Consultant shall submit draft versions of the addendum for each of the three contract documents for review by the County, and shall submit final versions following resolution of comments. Consultant shall also review each of the final contract documents for consistency and completeness in addressing the Project technical requirements.

Task 4. Shop Drawing Review

Consultant shall review shop drawing submittals on major equipment, materials, and construction techniques for air stripping system procurement, and general construction. Consultant services associated with this task shall include receipt and logging of shop drawing

submittals, review of shop drawings for design conformance, and resolution of shop drawing comments with the contractor.

Shop drawing submittals are anticipated for the air stripping system, tanks, pumps, instrumentation and control system, and buildings. The shop drawings shall be submitted directly to Consultant during the construction activities, and shall be reviewed by Consultant in a reasonable time period to maintain the Project schedule. Consultant shall log, file, and return copies of the shop drawings to the contractor. Upon completion of construction, appropriate shop drawings shall be incorporated by Consultant into the as-built design plan package.

Task 5. Construction Observation for Well Installation

Consultant shall provide construction observation services during Phase II well construction activities. Consultant shall prepare a written log of the geologic conditions for each well during boring advancement, provide health and safety monitoring during well construction, develop the final well design based on observed subsurface conditions and laboratory testing, document contractor conformance with design, document well as-built conditions, observe well development activities (extraction wells), and implement well development (monitoring wells).

Well construction shall be accomplished using cable tool drilling equipment and, possibly, air rotary drilling equipment. It is anticipated that two drilling rigs will be onsite throughout the estimated construction period of 7 months. A Consultant representative (geologist or engineer) shall be present at each well location during construction for up to 7 months. Consultant shall also provide personnel (Site Coordinator) to coordinate well construction activities on a 3/4 time basis during well construction for up to 7 months. Drilling services will be contracted for directly by the County.

Task 6. Construction Observation for Extraction, Treatment, and Discharge Systems

Consultant shall provide construction observation services during construction of the Phase II extraction, treatment and discharge systems. The services associated with this task shall include inspection of the constructed facilities, resolution of contractor questions during construction, preparation of field notebooks which log construction activities and progress, and coordination of contract or change order requests. Field log books shall be kept by Consultant and submitted to the County upon completion of construction.

Services for this task shall be provided on location at the Project site, and shall also include one observation trip each to the location of fabrication of the air stripping system and the instrumentation system control panel, if necessary to observe fabrication of the equipment.

Task 7. Groundwater Sampling

Consultant shall provide groundwater dedicated sampling equipment procurement assistance, perform groundwater sampling equipment installation, and perform groundwater sampling. Consultant shall assist the County in procurement, and shall install groundwater sampling equipment in the 25 wells that constitute the Phase II groundwater monitoring system. Consultant shall remove the nine existing sampling pumps from their present locations, and install them (following decontamination) into appropriate Phase II monitoring wells.

The County shall procure the 16 additional groundwater sampling pumps. Consultant shall assist the County during pump procurement. Consultant procurement assistance shall consist of preparation of a list of materials and equipment required for each groundwater pumping system, and identification of the appropriate vendor. Procurement information shall be prepared in a form acceptable to the County for incorporation into a County Purchase Order.

Consultant shall collect a total of 67 groundwater samples. Samples shall be collected from 30 monitoring wells for general groundwater quality characterization. Consultant shall also collect groundwater samples from the 37 monitoring and extraction wells that constitute the Phase II system for operational background water quality data. Samples shall be submitted to a County-designated analytical laboratory for analysis of volatile organic compounds. The costs for analytical services shall be billed directly to the County. Consultant shall provide data validation services, including preparation of a data validation report.

Task 8. Assistance With Start-up Testing

Consultant shall coordinate and observe start-up testing conducted by the contractors for the Project extraction, treatment, and discharge systems. Consultant services associated with this task shall include observation by Consultant during the start-up testing, preparation of field notebooks which document start-up testing activities and progress, and recommendations to the County regarding facility acceptance.

Start-up testing shall be the responsibility of the contractors, and startup requirements shall be included in the construction contract documents. Start-up testing shall consist of

activation of the extraction system, air stripping treatment system, scale control treatment system, and discharge system.

Task 9. Preparation of As-built Drawings and Final Operation and Maintenance Manual

Consultant shall prepare as-built drawings and the final version of the Operation and Maintenance Manual based on the as-built facility and equipment. Appropriate design drawings and Operation and Maintenance Manual sections shall be modified by Consultant and assembled into a final as-built drawing set and manual.

Consultant services associated with preparation of the as-built drawings shall include field mark ups of the design drawings based on construction observation records and field notes, and updating of CAD drawing files based on the field-marked drawings. Shop drawings shall also be incorporated, as appropriate, by Consultant into the as-built drawing set.

Consultant shall prepare the final version of the operation and maintenance manual. Consultant services shall include collection of equipment manuals from the contractors/suppliers, update of the appropriate sections of the manual, and submittal of the final version of the manual to the County.

Task 10. Preparation of Construction Documentation Report

Consultant shall prepare a Construction Documentation Report for Phase II construction. This report is a SOW-required submittal for review by the regulatory agencies. The report shall document and summarize the construction, data collection, and testing activities conducted during Phase II construction. Certain as-built drawings, including well construction diagrams, shall be included in the report.

Consultant shall submit a draft version of the report for review and approval by the County, and shall prepare a final version following resolution of comments. The final report shall be submitted to the regulatory agencies for review. Two copies of the draft report and 20 copies of the final report shall be prepared by Consultant for distribution.

Task 11. Operator Training

Consultant shall prepare and implement an operator training session regarding system operation and maintenance requirements. Consultant shall also coordinate and observe contractor-provided training for specific equipment included in the system. The services associated with this task shall include preparation of a training manual, presentation of a training session, coordination of hands-on training by the system operators, and observation of the contractor-provided training to evaluate its adequacy.

The Consultant training session shall address the following subjects: regulatory requirements for the remedial action; personnel responsibilities; system components and operating characteristics; the operation and maintenance manual; monitoring, sampling and analysis requirements; equipment calibration; maintenance schedules; and emergency procedures.

Task 12. Preparation of Progress Reports

Consultant shall prepare progress reports during Phase II construction for review by the County and submittal to EPA and Ecology. As specified in the Project Consent Decree, these progress reports shall be prepared monthly during periods of construction and quarterly, thereafter; and shall describe activities accomplished since the previous progress report, activities anticipated for the next reporting period, and any problems encountered or anticipated in commencing or completing these activities. Draft versions of each progress report shall be submitted by Consultant to the County for review, and a final version shall be submitted by Consultant to the EPA and Ecology following resolution of County comments.

REFERENCES

Landau Associates, Inc. 1992a - Final Groundwater Monitoring Plan, Phase II Remedial Design/Remedial Action, Colbert Landfill, Spokane, Washington.

Landau Associates, Inc. 1992b - Final Extraction Well Plan, Phase II Remedial Design/Remedial Action, Colbert Landfill, Spokane, Washington.

Landau Associates, Inc. 1992c - Final Treatment and Discharge Plan, Phase II Remedial Design/Remedial Action, Colbert Landfill, Spokane, Washington.

ATTACHMENT 2

COLBERT LANDFILL REMEDIAL DESIGN/REMEDIAL ACTION PHASE II CONSTRUCTION MANAGEMENT ENGINEERING SERVICES ESTIMATED COST BUDGET^(a)

TOTAL PROJECT

Estimated cost for Scope of Services defined in Section III of Agreement for the period 1992 through 1993 (inclusive).^(b)

Category	Budget
Consultant Labor at Direct Payroll Cost	\$280,760
Consultant Overhead (171 percent)	\$480,099
Major Subconsultant Total Labor ^(c)	\$106,300
Consultant and Subconsultant Nonlabor	<u>\$141,400</u> 131,400
COST SUBTOTAL	\$998,559
Consultant's Estimated Fee (16 percent)	<u>\$138,745</u>
TOTAL ESTIMATED COST	\$1,137,305
Contingency (10 percent)	<u>\$113,730</u>
MAXIMUM TOTAL AMOUNT	\$1,251,035

-
- (a) The estimated cost budget is based on and subject to the assumptions and qualifications in the attached cost summary notes
- (b) Costs include an estimated 6 percent inflation factor for 1993 services.
- (c) Includes Major Subconsultant Direct Payroll Cost and Overhead.

SUMMARY BY TASK^(a)

Task Number	Title	Task Budget
1	Project Management	\$112,297
2	Assistance With Bidding	\$39,958
3	Assistance With Contracting	\$35,308
4	Shop Drawing Review	\$46,504
5	Construction Observation for Well Installation	\$352,090
6	Construction Observation for Extraction, Treatment, and Discharge System Construction	\$226,474
7	Aquifer Sampling, Analysis, and Verification	\$52,158
8	Assistance with Start-up Testing	\$48,419
9	Preparation of As-built Drawings and Final Operation and Maintenance Manual	\$110,563
10	Preparation of Construction Documentation Report	\$59,970
11	Operator Training	\$33,853
12	Preparation of Progress Reports	<u>\$19,712</u>
	TOTAL ESTIMATED COST	\$1,137,305
	Contingency (Approximately 10 Percent of Cost)	<u>\$113,730</u>
	MAXIMUM TOTAL AMOUNT	\$1,251,035

(a) Task budgets are advisory only. Redistribution of the budget between tasks is permissible, provided the Total Estimated Cost is not exceeded.

COST SUMMARY NOTES

I. Overall Project Management

- Overall contracting, coordination, budget management.
- Includes up to 8 person-trips to Spokane.

II. Assistance With Bidding

- Includes up to 40 Consultant person-days for assistance with preparation of three bid packages, and evaluation of bid submittals, including: well drilling, air stripping system procurement, and general construction.
- Includes up to \$2,500 for civil engineering subconsultant and up to \$3,000 for structural and electrical engineering subconsultant services.
- Includes brief memoranda regarding contractor recommendations.
- No trips to Spokane included.
- Includes 3 copies of each draft bid package and one copy of each final document.
- Assumes one round of bid package revisions.

III. Assistance With Contracting

- Includes up to 35 Consultant person-days for assistance with preparation of three contract documents: well drilling, air stripping system procurement, and general construction.
- Includes up to \$500 for civil engineering subconsultant, and up to \$2,000 for structural and electrical engineering subconsultant.
- Includes preparation of 3 copies of each draft contract document and one copy of each final document.
- Assumes one round of contract document revisions.
- No trips to Spokane included.

IV. Shop Drawing Review

- Includes up to 25 Consultant person-days for review of shop drawing submittals for two contracts: air stripping system procurement, and general construction.

- Includes up to \$2,000 for civil engineering subconsultant and up to \$18,000 for structural and electrical engineering subconsultant.
- Assumes one round of shop drawing review for each submittal.
- No trips to Spokane included.

V. Construction Observation for Well Installation

- Includes one Consultant senior staff engineer or geologist and one technician full-time (8 hours per day) at the site for up to 7 months.
- Includes one Consultant project engineer or geologist (Site Coordinator) $\frac{3}{4}$ time (6 hours per day) for up to 7 months.
- Includes \$7,500 for purchase of two computers and ancillary equipment.
- Assumes facilities and equipment provided by the County during Phase I will be provided, including:
 - Site office
 - Computer
 - Fax
 - Telephones (field and office)
 - Backhoe/forklift
 - Air compressors with filters
 - Water level indicators (3)
 - Sounding tapes
 - Groundwater sampling equipment
 - Office furniture
 - Pressure washer
 - PIDs (2)
 - Combustible gas meter
 - Tool kits
 - pH and conductivity meters (2)
- Assumes County will provide two field vehicles for Consultant personnel.
- Assumes 2 drilling rigs present onsite throughout construction.
- Includes up to \$7,000 for location and elevation survey of all new wells by civil engineering subconsultant.
- Includes one Consultant field vehicle for 7 months for Site Coordinator at \$400/month.
- Includes \$20/day for miscellaneous field equipment.
- Includes up to 4 person-trips to Spokane by Consultant project manager.
- Includes \$500/month for 7 months for soil sampling equipment (2 sets).

- Includes up to \$10,000 for improvements related to site access.
- Includes up to \$1,000/month for site utilities (water, electric, garbage, telephone).
- Includes up to \$1,000/month for miscellaneous materials and supplies.

VI. Construction Observation for Extraction, Treatment and Discharge Systems

- Includes up to 200 Consultant person-days of project and senior staff level engineer services for construction observation at Project location for construction of extraction, treatment, and discharge systems, excluding well construction (Task V).
- Includes up to \$36,000 for civil engineering and surveying services and up to \$28,000 for structural and electrical engineering services.
- Assumes a Consultant representative (engineer or technician) shall be present during all major construction activities.
- Includes up to 10 person-trips to Spokane by Consultant project manager or senior engineer, and 1 person-trip each to locations of fabrication of the air stripping system and the instrumentation control panel.
- Assumes construction will be completed within a 6-month period.
- No testing of constructed facilities is included.
- Assumes costs for quality assurance testing will be the responsibility of the Contractor.

VII. Groundwater Sampling

- Includes up to 4 Consultant person-days for assistance with sampling equipment procurement.
- Includes a Consultant 2-person crew for up to 17 days for installation of dedicated sampling equipment in 25 groundwater monitoring wells.
- Includes a Consultant 2-person crew for up to 18 days for sampling of 30 wells for general groundwater quality characterization,; and sampling of 37 monitoring and extraction wells that constitute the Phase II system for operational background water quality data.
- Samples shall be delivered to County-designated analytical laboratory for analyses; the costs for analyses will be billed directly to the County.
- Includes up to 3 Consultant person-days for data validation services and preparation of data validation report.

- Includes up to \$1,000/month for site utilities for up to 2 months.
- Includes up to \$1,100 for miscellaneous equipment.
- Includes up to \$400 for vehicle usage.
- Includes up to \$1,000/month for miscellaneous supplies for up to 2 months.
- Does not include trip to Spokane.

VIII. Assistance With Start-up Testing

- Includes up to 26 Consultant person-days of assistance with start-up testing at Project location.
- Includes up to \$16,000 for structural and electrical engineering subconsultant assistance during startup testing.
- Includes sampling of extracted and treated groundwater during startup; Samples will be delivered to County-designated analytical laboratory for analyses; the costs for analyses will be billed directly to the County.
- Includes up to 4 person-trips to Spokane.

IX. Preparation of As-Built Drawings and Final Operation and Maintenance Manual

- Includes up to 60 Consultant staff engineer person-days and 60 Consultant drafting person-days for preparation of as-built drawings and update of the draft Operation and Maintenance Manual based on the facility and equipment as constructed.
- Includes up to \$3,000 for civil engineering subconsultant services and \$12,000 for structural and electrical engineering subconsultant services.
- Electronic files for each drawing, five paper copies of drawing, and five copies of the updated Operation and Maintenance Manual will be delivered to the County.
- Includes up to 2 person-trips to Spokane.

X. Preparation of Construction Documentation Report

- Includes up to 45 Consultant engineer person-days and 30 Consultant drafting person-days for preparation of Construction Documentation Report, including update of CAD drawing files, based on field-marked drawings.
- Includes up to \$3,000 for civil engineering subconsultant and up to \$3,000 for structural and electrical engineering subconsultant.

- Three copies of draft report and fifteen copies of final report will be delivered.
- Includes 1 trip to Seattle for agency meeting. No trips to Spokane included.

XI. Operator Training

- Includes up to 5 Consultant person-days for preparation of training manual, and delivery of five copies of the document to the County.
- Includes up to 30 Consultant person-days for operator training regarding system operation and maintenance, and coordination of training provided by the contractors for the Project extraction, treatment, and discharge systems.
- Includes up to 2 person-trips to Spokane.

XII. Progress Reports

- Includes up to 15 Consultant person-days for preparation of monthly progress reports during periods of construction, quarterly thereafter.
- Assumes progress report scope is limited to that described in Colbert Landfill Consent Decree.
- No trips included.

Approved pursuant to Resolution No. 92 1129
92. 8/11

**AMENDMENT NO. 1 TO AGREEMENT FOR PROFESSIONAL
SERVICES BETWEEN LANDAU ASSOCIATES, INC. AND SPOKANE COUNTY
REGARDING THE COLBERT LANDFILL RD/RA**

THIS AMENDMENT amends the July, 1992 "Agreement to perform Engineering Services for Phase II Remedial Action-Colbert Landfill RD/RA Project-Spokane County, Washington" (hereinafter referred to as the "1992 Agreement") between Spokane County, a political subdivision of the State of Washington, and Landau Associates, Inc. (hereinafter referred to as the "Engineer"), the approval of which agreement was authorized pursuant to Commissioners' Resolution No. 92 1129.

R E C I T A L S:

A. Pursuant to the 1992 Agreement, Spokane County retained the Engineer to provide construction management and related professional engineering services associated with the Colbert Landfill Phase II Remedial Action, County Public Works Project No. 92-1129.

B. An amendment to the 1992 agreement is needed to increase the Estimated Maximum Total Amount for the Engineer's services by \$106,000; for the reasons cited in the letter from John A. Markus of Landau Associates, Inc. to Dean Fowler of the Spokane County Division of Utilities dated September 26, 1994, a copy of which letter is attached hereto and incorporated by reference.

NOW, THEREFORE, in consideration of the mutual covenants and promises contained herein, Spokane County and Engineer agree as follows:

T E R M S

(1) Section VI, Compensation and Terms of Payment, of the 1992 Agreement is amended to increase the Estimated Maximum Total Amount for the Engineer's services by \$106,000, from \$1,251,035 to \$1,357,035.

(2) No increase in the Fixed Percent Fee or contingency funds provided for in Section VI shall be provided to Engineer under this Amendment.

Date executed: December 30, 1994.

BOARD OF COUNTY COMMISSIONERS
OF SPOKANE COUNTY, WASHINGTON

By: [Signature]
Steven Hasson, Chairman

ATTEST:

William E. Donahue
Clerk of the Board

By: [Signature]
Deputy Clerk

Date executed: December ___, 1994.

LANDAU ASSOCIATES, INC.

By: John A Markus 12/16/94
(Signature)
Project Manager
(Title)

Approved as to form:

Michael C. Deming



LANDAU
ASSOCIATES.
INC.

Environmental and Geotechnical Services

RECEIVED

SEP 27 1994

September 26, 1994

Mr. Dean Fowler, P.E.
Spokane County Utilities Department
1026 West Broadway
Spokane, Washington 99260

**RE: COLBERT LANDFILL RD/RA
PHASE II CONSTRUCTION ACTIVITIES
REQUEST FOR BUDGET AMENDMENT
SPOKANE COUNTY PROJECT 92-1129**

Dear Dean:

This letter notifies Spokane County that Landau Associates expects to soon expend the authorized budget for the Colbert Landfill Phase II Remedial Action construction project prior to completing project scope as defined in our Agreement (Spokane County Project Number 92-1129). This letter summarizes the reasons for the projected budgetary short-fall and requests additional budget for project completion.

There are two fundamental reasons that have caused us to exceed our budgetary estimates for the project: the completion of construction and testing were protracted several months and additions to the project scope, including but not necessarily limited to NPDES permitting and implementation and Consent Decree compliance monitoring and sampling. Landau Associates has notified Spokane County verbally and in written correspondence of the potential budget impact of accommodating each new or protracted schedule activity and we have made a concerted effort to accomplish the extended scope within our existing budget. The level of effort required to complete these activities has been and continues to be difficult to predict because scope and implementation schedule for these activities are not definable in absolute terms and they are beyond the direct control of Landau Associates.

Delays in completion of construction and testing by Ershigs (Spokane County Project No. 93-068) and Humphrey Construction (Spokane County Project No. 93-069) have been excessive and unanticipated. In our letter to you dated January 21, 1994, we requested additional budget for accomplishing the required construction services for the project based on our understanding that construction and testing activities on the project would be completed by April 5, 1994; this allowed approximately a 2.5 month extension in the construction schedule for Humphrey Construction from the original contractual completion date. In January we estimated that approximately \$136,680 additional budget would be required to accomplish the

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necessary construction management services as a result of the delay in completion of construction. In response to our letter, the County authorized the full amount of the project contingency fund in the amount of \$113,730. This however, created a \$22,950 potential short-fall in budget, which we had hope to avoid by careful planning and redistribution of budget from existing individual tasks. As you know, completion of construction by Humphrey Construction was conditionally accepted by Landau Associates and Spokane County on June 28, 1994, approximately 5 months from the original scheduled date of completion and approximately 2.5 months past our January estimate of April 5.

Spokane County has collected \$25,500 as liquidated damages from Humphrey and Ershigs and chose to waive assessment of another \$23,000 in liquidated damages due to contractor delays in completion of construction and testing. Ershigs required 30 days longer than expected to complete their construction and testing activities: Spokane County waived assessment of liquidated damages for 15 of the days, but did assess damages on Ershigs for the remaining 15 days at a value of \$7500. Humphrey Construction required 68 days beyond the estimated completion date of April 20, which became the revised date for completion by execution Change Order 17. Spokane County waived assessment of liquidated damages for approximately 32 of the days, but did assess damages on Ershigs for 36 days of delay at a value of \$18,000. Liquidated damages were suspended on Humphrey Construction on June 28, 1994 and the project was conditionally accepted as final by Landau Associates and Spokane County based on the work completed and the operational status of the project. A few minor deficiencies in Humphrey Construction's work remained and were to be corrected by July 14, 1994.

Humphrey Construction did not complete the identified deficiencies by the specified date. By August 1, Humphrey Construction had made substantial progress in correcting the deficiencies known to exist on June 28, 1994, but other deficiencies were discovered in the interim. More than 95 percent of the deficiencies are associated with the instrumentation, control, and monitoring system, which was subcontracted by Humphrey Construction to Technical Systems Incorporated (TSI). As of the date of this letter there are still significant deficiencies in the Contractor's work that needs correction. Spokane County has continued to request the services of Landau Associates in coordinating and ensuring the deficiencies are adequately addressed and resolved. Pending deficiencies include:

- VHF radios used for data communication between treatment facility and extraction wells are causing interference with television reception of channel 4 in the vicinity of the site. Interference in terms of the number of individuals affected is likely exacerbated by TSIs non-approved substitution of omni-directional antennas for uni-directional antennas, which were specified in the Contract.
- Operational deficiencies in the computer automated report generation system: database and Excell program.

- Unexplained system failures - including: well shutdowns, plant shutdowns, flow errors, air to water ratio control system, unreliable operation of the automatic dialing alarm system (ADAS).
- Operation and Maintenance Manual documentation deficiencies - software configuration documentation for database, report generation system, and operating descriptions for Operator Interface Terminal control settings.
- Confirmation of heat build-up corrective action at Pump Control Panels (PCPs) - submission of warranty bond for proposed extended warranty period. Operation and maintenance data on PCP fans, air filters and temperature control systems.

Presently, it is not clear how long it will take for the Contractor(s) to correct the remaining deficiencies. To date the period of construction has been protracted almost 6 months beyond the April 5, 1994 completion date assumed in our January 21, 1994 letter requesting additional budget. Since June 28, 1994, we have absorbed the scope of resolving the construction deficiencies within our budgets for Task 1 Project Management, Task 9 Preparation of As-Built Drawings and Final Operation and Maintenance Manual and Task 11 Operator Training.

Coordination of National Pollutant Discharge Elimination System (NPDES) permit issues and implementation of an extensive NPDES monitoring and reporting program were not included in the scope and budget of our existing construction management services agreement. We have made you aware of this on several occasions, but we have made every effort to absorb the scope and budgetary requirements within our budget for construction management services. We have performed extensive analyses and prepared numerous correspondences and technical documents for the Washington State Department of Ecology (Ecology). We have planned and implemented extensive Ecology-mandated sampling and analyses programs, trained County operators in specific sampling procedures, protocols and data interpretation. We have participated in several meetings and telephone conferences, discussed NPDES issues at length with County staff and made presentations at public meetings. Additionally, we had to significantly modify the project quality assurance project plan and the field sampling plan to incorporate NPDES requirements.

At the County's request, Landau Associates implemented the initial round (June 1994) of compliance groundwater sampling. Because the level of effort to accomplish this task was relatively finite, Landau Associates proposed a budget of \$2400 to address this out of scope activity in our letter to Spokane County dated June 15, 1994. Landau Associates accomplished the necessary sampling but to date our budget has not been augmented commensurately with our request.

In addition to the activities described above, Landau Associates provided other services beyond our budgeted level of effort and outside our identified scope of services. Landau Associates participated

in several meetings with Spokane County legal representatives and prepared supporting documentation, related to potential litigation due to unacceptable performance by Humphrey Construction. Although this may be construed as a construction project management function, we did not budget or anticipate the level of effort required to meet the County's needs with respect to this matter.

In summary, Landau Associates' budget has been significantly impacted by the activities described above. The protracted construction and testing schedules of Ershigs and Humphrey Construction, and implementation of the NPDES sampling and monitoring program caused Landau Associates to expend a significantly greater level of effort than previously estimated. Consequently, as of September 24 several of our task budgets have been significantly exceeded: Task 6 Construction Observation for Extraction, Treatment and Discharge Systems by approximately \$10,000 and Task 8 Assistance with Start-up Testing by approximately \$50,000. The lengthening of the time period for completion of the construction activities more than 5 months (to date) beyond the date assumed in our January 1994 request for a budget adjustment, and the unanticipated level of effort required to address NPDES issues has caused our project management budget to be exceeded by approximately \$44,000. Implementation of the groundwater compliance sampling and monitoring in June 1994 caused us to expend \$2,400, which resulted in our Task 7 budget to be exceeded. As of September 10, 1994, we estimate that the total budget short-fall due to the issues described in this letter amount to \$106,400.

As of September 24, 1994, we estimate that approximately \$20,000 remain in Landau Associates's construction management and engineering services budget. Unless there is additional budget allocated to the project budget, Landau Associates will not be able to complete the remainder of the scope of services for this project. Specific tasks that remain to be completed are the Task 9 Preparation of As-Built Drawings and Final Operation and Maintenance Manual and Task 10 Preparation of Construction Documentation Report; the original budgets allocated to these tasks would be adequate if the project budget were augmented to account for the budgetary short-falls experienced in other areas of the project (i.e. as described in the previous paragraph). Additionally, unresolved issues with the performance of the ICM system must be resolved by Humphrey Construction prior to final acceptance of the construction project and completion of our construction management responsibilities. Similarly, resolution of NPDES issues continues to require a significant effort on our part and it has been impossible for us to accurately estimate the level of effort required to resolve the issues. We anticipate that a budget increase of \$106,000 will be adequate to offset the current budgetary short-fall associated with the protracted completion of construction, testing and NPDES issues.

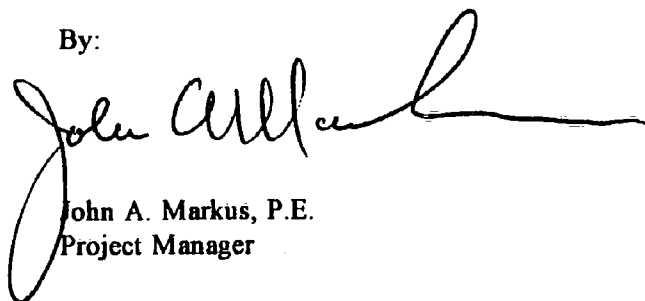
We want to emphasize that Landau Associates has made every effort to complete the project within our existing budget, including providing requested services that are beyond the budgeted level of

effort or are out of scope. Due to our commitment to the project and to serve Spokane County equitably, we have already absorbed (written-off) over \$100,000 in project costs that most firms would have billed to Spokane County. It is only after we have exhausted all other reasonable options that we request this budget increase. We believe that our efforts have paid significant dividends to Spokane County; the County is obtaining a facility with a constructed value that is probably \$1,000,000 greater than its actual construction cost. Even though the relationships with the contractors were divisive throughout most of the construction period, Landau Associates kept the combined (Ershigs plus Humphrey Construction) change order percentage to approximately 5.7 percent of the combined value of the construction contracts; this is well within the accepted range for a water or wastewater treatment public works project and far below the norm for a Superfund remediation project.

Spokane County may approve the requested increase in budget by signing the attached authorization page, which is attached to and made part of this letter by reference, or other mutually approved method. Our current Agreement does not obligate Spokane County for payment of our services beyond the Maximum Total Amount unless we receive your prior written approval. As you know, the project contingency fund for this project has already been allocated to the project in accordance with your authorization dated December 27, 1994; therefore a formal amendment to our Agreement is required. We anticipate that our remaining budget will allow us to continue providing services on the project through approximately October 7, 1994. Consequently, we request that our budget be adjusted prior to October 10, 1994. Please contact me, if you have any questions or need additional information.

LANDAU ASSOCIATES, INC.

By:

A handwritten signature in dark ink, appearing to read "John A. Markus", with a long horizontal flourish extending to the right.

John A. Markus, P.E.
Project Manager

JAM/jam
Project No. 124002.10

AUTHORIZATION

The scope of service, recommended budget adjustment, and contractual conditions as described in this request for budget amendment for Spokane County Project 92-1129 is accepted and Landau Associates is authorized to proceed.

By: _____
signature * printed

For: _____
Organization * date

* Name of the person with contractual authority and the organization for payment of Landau Associates, Inc. Billing.

BEFORE THE BOARD OF COUNTY COMMISSIONERS
OF SPOKANE COUNTY, WASHINGTON

IN THE MATTER OF EXECUTING AN)
AGREEMENT WITH LANDAU ASSOCIATES,) R E S O L U T I O N
INC., FOR ENGINEERING SERVICES)
REGARDING REMEDIAL ACTION AT THE)
COLBERT LANDFILL SITE)

WHEREAS, pursuant to the provisions of the Revised Code of Washington, Section 36.32.120(6), the Board of County Commissioners of Spokane County has the care of County property and the management of County funds and business; and

WHEREAS, pursuant to Resolution No. 88-1278, the Board designated Landau Associates, Inc. as the most highly qualified firm to perform engineering services for the remedial design/remedial action at the Colbert Landfill site; and

WHEREAS, on March 21, 1989, pursuant to Resolution No. 89-0266 Spokane County entered into an agreement with Landau Associates, Inc. to provide professional engineering services respecting Phase I Remedial Design, Phase I Remedial Action and Phase II Remedial Design for the Colbert Landfill site; and

WHEREAS, on June 1, 1993, pursuant to Resolution No. 93-0609, the parties amended the 1989 agreement to increase the scope of services and the maximum price allowed for Landau's services under the agreement; and

WHEREAS, in approximately July, 1992, pursuant to Resolution No. 92-1129, Spokane County entered into an agreement with Landau Associates, Inc. to provide professional engineering services for the Phase II Remedial Action at the Colbert Landfill site; and

WHEREAS, in 1993-94, pursuant to the above referenced agreements, Landau assisted the County with design and construction management of a groundwater extraction and treatment system for the Colbert Landfill that included 10 extraction wells and an air stripping tower; and

WHEREAS, the County requires on-going consulting and engineering services from Landau to assist the County Division of Utilities in resolving issues involving operation and maintenance of the groundwater/extraction and treatment systems, data analysis and regulatory compliance and reporting; and

WHEREAS, such services are within the scope of engineering services contemplated for Landau under Resolution No. 88-1278; and

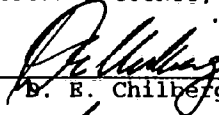
WHEREAS, County Utilities staff has negotiated a contract with Landau to provide such additional services as tasks are authorized in writing by the County Director of Public Works or his designee, for a maximum total price of \$225,000, which amount may not be exceeded without a formal amendment to such contract approved by the Board;

NOW, THEREFORE, BE IT RESOLVED that the Board hereby approve that certain agreement entitled "Agreement to Perform Engineering Services for Colbert Landfill Remedial Action Project"; pursuant to which Landau Associates, Inc. will provide engineering and consulting services to assist the County Division of Utilities in resolving issues involving operation and maintenance of the groundwater/extraction and treatment systems, data analysis and regulatory compliance and reporting for the Colbert Landfill Remedial Action project; for a maximum total amount under such

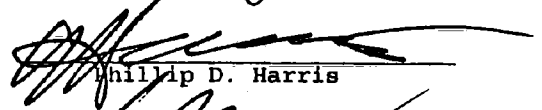
contract of \$225,000, which amount may not be exceeded without a formal written amendment executed in advance by the Board, which amendment (s) may be approved at other than an open meeting by the Board, through signature of a majority of its members or by its chairman.

DATED this 21st day of February, 1995


BOARD OF COUNTY COMMISSIONERS
OF SPOKANE COUNTY, WASHINGTON



B. E. Chilberg, Chairman



Phillip D. Harris



Steven Hasson

ATTEST:

WILLIAM B. DONAHUE,
Clerk of the Board



Deputy Clerk

**AGREEMENT TO PERFORM
ENGINEERING SERVICES
FOR
COLBERT LANDFILL REMEDIAL ACTION PROJECT
SPOKANE COUNTY, WASHINGTON**

TABLE OF CONTENTS

<u>Section</u>	<u>Subject</u>	<u>Page</u>
I.	INCORPORATION OF RECITALS AND CONSENT DECREE	2
II.	CONTRACT DOCUMENTS	3
III.	SCOPE OF SERVICES	3
IV.	CRITERIA AND CONDITIONS	3
V.	TIME OF BEGINNING AND COMPLETION	5
VI.	COMPENSATION AND TERMS OF PAYMENT	5
VII.	COMPLIANCE WITH LAWS	7
VIII.	SUBLETTING OR ASSIGNING OF WORK	9
IX.	LEGAL RELATIONS	9
X.	TERMINATION OF AGREEMENT	12
XI.	SPECIAL STIPULATIONS	13

This Agreement is made and entered into this ____ day of _____, 1994 by and between Spokane County, a political subdivision of the State of Washington, having offices for the transaction of business at West 1116 Broadway Avenue, Spokane, Washington, hereinafter referred to as the "County", and Landau Associates, Inc., having offices for the transaction of business at 23107 100th Avenue West, P.O. Box 1029, Edmonds, Washington, 98020-9129, a Washington corporation, hereinafter referred to as the "Consultant".

This agreement specifies the terms and conditions under which the Consultant will provide engineering consulting services to the County in support of ongoing operations for the Colbert Landfill Remedial Action (RA) Project in Spokane County, Washington, hereinafter referred to as the "Project".

RECITALS

A. On January 9, 1989, the United States Environmental Protection Agency (EPA) and the Washington State Department of Ecology (Ecology) filed a complaint in U.S. District Court for the Eastern District of Washington, Cause No. C-89-033-RJM, against the County and Key Tronic Corporation (Key Tronic) under federal and state hazardous waste and "Superfund" legislation. The complaint alleges that the County and Key Tronic are liable for the release, threatened release, or disposal of hazardous substances, pollutants, or contaminants at the Colbert Landfill site, located in Spokane County, Washington.

B. On February 28, 1989, the County and Key Tronic entered into a Consent Decree with EPA and Ecology whereby the County agreed to implement the final remedial action plan set forth in the Consent Decree for cleanup of the site. The Consent Decree incorporates, by reference, Appendices A, B, C, and D. Page VIII-1 and VIII-2 of Appendix B were amended by the U.S. District Court on February 28, 1989, according to substituted language contained in Exhibit F, Supplemental Memorandum in Support of Motion for Entry of Consent Decree (filed with the Court).

C. Among other requirements, the Consent Decree:

(1) Provides for the establishment of schedules, dates, and deadlines for the various steps and requirements (including, without limitation, progress reports, work plans, and other submittals);

(2) Identifies certain performance and compliance requirements (including, with limitation, statutory and regulatory criteria, standards, regulations, guidance, and technical and procedural requirements) by which the work plans and scope of work are to be performed and accomplished;

(3) Provides for certain requisite approvals by EPA and Ecology;

(4) Establishes certain notification requirements (including timing) with regard to matters of dispute, and certain procedures for resolution of disputes arising from carrying out the requirements of the Consent Decree;

(5) Establishes certain procedures and requirements (including timing) governing requests for extensions of schedules;

(6) Provides for certain penalties for violations of the Consent Decree, including failure to make a submittal to EPA and Ecology in accordance with the Consent Decree, or to comply with any required and approved time schedule; and

(7) Provides for implementation of remedial action by EPA/Ecology, at the County's expense, upon the County's failure without good cause to comply with the Consent Decree.

D. The Consent Decree requires the County to provide a copy of the Consent Decree to each contractor or subcontractor retained to perform work contemplated by the Consent Decree, and to condition any contract for such work on compliance with the Consent Decree.

E. The Consent Decree requires that the County preserve, during the pendency of the Consent Decree and for ten (10) years from the date of its termination, all records, reports, documents, and underlying data in their possession or in the possession of their employees and agents, relevant to the implementation of the Consent Decree, unless otherwise ordered by the Court. The County is further obligated to require all such records in the possession of contractors to be provided to them and to retain copies of all records which are nonduplicative.

NOW, THEREFORE, in consideration of the mutual covenants and promises contained herein, the County and the Consultant mutually agree to the following terms, stipulations, and conditions of this Agreement, and any amendments thereto shall be binding upon both parties:

I. INCORPORATION OF RECITALS AND CONSENT DECREE

The Recitals above and the Consent Decree are incorporated by reference and made a part of this Agreement. Both parties have thoroughly reviewed the Recitals and the provisions of the Consent Decree.

II. CONTRACT DOCUMENTS

This Agreement includes and incorporates Section I-XI, Attachment 1—Scope of Services, and Attachment 2—Budget and Schedule, as the Contract Documents.

III. SCOPE OF SERVICES

This Agreement is expressly conditioned upon the performance of the Consultant's work in compliance with the Consent Decree.

The Consultant shall furnish all services and labor necessary to conduct and complete the Scope of Services described in Attachment 1.

The Consultant may subcontract certain services, including but not limited to, tasks or subtasks related to site investigation and reconnaissance aspects of the Project.

For the purpose of this Agreement, "Major Subconsultants" shall be defined as those firms or individuals retained by the Consultant to perform professional engineering and surveying services within the Scope of Services. The term "subcontractors" shall include Major Subconsultants, and all subcontractors and subconsultants providing services within the Scope of Services.

The Consultant is the lead engineering consultant for performance of the services provided for in this Agreement, and shall retain and coordinate the activities of all necessary subcontractors.

The Consultant shall obtain information that may have a bearing on the Project from local units of government and public and private utilities, and shall be authorized to procure information from other authorities besides the County. The Consultant shall keep the County advised as to the extent of these contacts and the results thereof.

IV. CRITERIA AND CONDITIONS

The Consultant shall have sufficient knowledge, experience, and training to apply the latest edition of applicable state and federal health and safety requirements for working at hazardous waste sites insofar as they apply to the Project.

Except as otherwise provided in this Agreement, the Consultant shall, with due diligence, furnish all necessary qualified personnel and subcontractors, materials and equipment, and manage and coordinate the same to complete the Scope of Services within the schedule included in Attachment 1.

The Consultant shall assist the County in fully complying with pertinent requirements of the Consent Decree, in an economical, timely, and cost-effective manner for the County. The Consultant will promptly alert the County as to matters of which the Consultant becomes aware and which require notification by the County under the Consent Decree, including, but not limited to, timely requests for extensions of time or objections to actions or decisions of EPA or Ecology, which are or may be subject to the dispute resolution provisions of the Consent Decree.

The Consultant's services shall be coordinated with the County Public Works Director (or his authorized designee), who may issue written or oral instructions regarding the Consultant's performance on the Project. Any instructions that materially affect the scope of services, price, period of performance, or any other provision of this Agreement, shall require an amendment to this Agreement executed with the same formalities as this Agreement.

The Consultant shall ensure that a copy of the Consent Decree is provided to each Major Subconsultant retained to perform work under the Scope of Services contained in this Agreement.

As required in Appendix D of the Consent Decree, and at the request of the County and EPA, the Consultant shall, in conjunction with the County, furnish the personnel, services, documents, and materials needed to assist EPA in the collection of evidence to document work performed and costs expended by the Consultant or its subcontractors pursuant to this Agreement in order to aid cost recovery efforts by the United States. Such assistance shall include providing all requested assistance in the interpretation of evidence and costs, and providing requested testimony. All such assistance provided by the Consultant or its subcontractors, requested by the County or EPA, shall be considered extra work and shall entitle the Consultant to an equitable adjustment in compensation and other provisions of this Agreement that may be affected.

V. TIME OF BEGINNING AND COMPLETION

This Agreement shall be in effect from September 11, 1994 through January 31, 1996. Notwithstanding the date of execution of this Agreement, it is agreed that written authorization and notice to proceed shall be provided to the Consultant by the County.

Established completion times for tasks may be extended due to delays attributable to the County, unavoidable delays caused by governmental action or other conditions beyond the control of the Consultant, or by mutual consent of the County and the Consultant. The Consultant may adjust its personnel to meet required schedules, but time adjustments for completion may be made only upon written approval of the County.

The County shall have the right to review and examine the Consultant's activities and products at any time. Progress reports may be required by the County in the event of delays attributable to the Consultant.

VI. COMPENSATION AND TERMS OF PAYMENT

Compensation by the County to the Consultant shall be as follows (see Attachment 2):

A. Cost Plus a Fee.

(1) For those services enumerated in Section III above, the Consultant shall be paid its Direct Payroll Cost, Overhead, Direct Expenses, and a Fee. A Maximum Total Amount has been established in the sum of Two Hundred Fifty Thousand dollars (\$225,000), which shall not be exceeded without a formal amendment to this Agreement.

(2) A Fee of 16 percent of Direct Payroll Cost plus Overhead is established and may not be changed, except in the case of a formal amendment to this Agreement.

B. Maximum Total Amount. The Consultant shall make reasonable efforts to complete the Scope of Services within the Maximum Total Amount and with each authorized task budget, and shall keep the County informed of the financial progress of expenditures so that the Maximum Total Amount, task budget, or scope can be adjusted if found to be necessary. The Maximum Total Amount shall not be exceeded without the County's prior written approval, and the County is not otherwise obligated to pay the Consultant for costs incurred beyond the Maximum Total Amount. If the Maximum Total Amount is increased, the Consultant's excess

costs expended before such increase shall be allowable to the same extent as if such costs had been incurred after the approved increase.

C. Direct Payroll Cost. Direct Payroll Cost is the sum of the direct salaries or wages paid to the employees of the Consultant and its Major Subconsultants for services directly performed pursuant to this Agreement, exclusive of all payroll related taxes, payments, premiums, and benefits. The Direct Payroll Cost is estimated to be Sixty-Eight Thousand, Five Hundred Dollars (\$68,500).

D. Overhead. Overhead is the total overhead cost applicable to the services performed by the Consultant and its Major Subconsultants pursuant to this Agreement. A negotiated overhead of One Hundred Sixty-Four Percent (164%) of the Direct Payroll Cost shall be utilized to determine compensation to be paid by the County for all services performed by the Consultant and its Major Subconsultants and described in Attachment 1.

E. Direct Expenses. Direct Expenses include all reasonable and necessary expenses incurred by the Consultant and its Major Subconsultants in performing the services pursuant to this Agreement, other than the Direct Payroll Cost and Overhead. Direct Expenses shall include, but are not limited to, rebillables for project purchases, travel, communications, equipment rental, printing, Consultant-owned equipment charge, and subcontractor costs.

F. Terms of Payment.

(1) The Consultant shall be paid monthly by the County for services completed pursuant to this Agreement. Invoices shall be sent to: Dean Fowler, Spokane County Division of Public Works, Utilities Department, West 1026 Broadway, Spokane, Washington 99260-0180.

Invoices shall list the task number, employee hours, hourly payroll cost, overhead, direct expenses, and the Fee. The Fee shall be billed on a prorated basis, based on the sum of the direct payroll cost and overhead accumulated during the defined billing period.

(2) Payment shall be made to the Consultant by the County within thirty (30) days after receipt by the County of the Consultant's invoice and appropriate documentation. The County shall pay interest on any overdue amounts at the rate of one percent (1%) per month, but at least One Dollar (\$1.00) per month. Payments shall not be deemed past due as to any amounts required to be withheld under state or federal law, or when the County supplies written notice that payment is being withheld because of a good faith dispute; provided that resolution of such dispute in Consultant's favor shall entitle Consultant to the interest under this subparagraph that would otherwise be due on the delinquent and unpaid amounts. Payments by the County shall first be credited to interest and then to principal.

(3) Payment shall constitute full compensation for services rendered and for all supervision, labor, supplies, materials, equipment or use thereof, and for all other incidentals necessary to complete the scope of services under this Agreement.

(4) The Consultant shall permit the County, from time to time as the County deems necessary (including after the expiration or termination of this Agreement), to inspect and audit, at any reasonable times at the Consultant's or subcontractors' offices, all pertinent books and records of the Consultant and any subcontractor or other person or entity that has performed services or work in connection with or related to the Consultant's services under this Agreement, to verify the accuracy of accounting records; and shall supply the County with, or shall permit the County to make, a copy of relevant project records requested. The Consultant shall require that such inspection, audit, or copying right of the County as a condition of any subcontract, agreement, or other arrangement under which any other person or entity is permitted to perform work in connection with or related to the Consultant's services under this Agreement.

The Consultant shall keep complete and accurate time records with respect to all salaries paid, as well as complete and accurate records in accordance with generally accepted accounting practices of all other reimbursable costs and expenses for purposes of audit. These records shall be retained and made available for inspection by any authorized representative of the County, state, or federal government for a period of six (6) years after expiration or termination of this Agreement. At the end of the six (6) year period, the County shall be notified by the Consultant of the intent of the Consultant or any subcontractor to destroy or discard such records, in order to allow the County the opportunity to take possession of such records before they are destroyed.

VII. COMPLIANCE WITH LAWS

A. General Requirement. The Consultant shall perform and comply with all applicable laws of the United States and the State of Washington, and the laws and ordinances of local agencies, including the ordinances of Spokane County, and rules, regulations, orders, and directives of their administrative agencies and the officers thereof to accomplish the Scope of Services described herein.

B. Licenses and Similar Authorizations. The Consultant shall secure and maintain in full force and effect during the term of this Agreement all required licenses, permits, and similar legal authorizations, and comply with all requirements thereof, to complete the Scope of Services described herein except for any permits and licenses required of the County for construction or operation of the Project.

C. Nondiscrimination and Affirmative Action. During the performance of this Agreement, the Consultant agrees not to discriminate against any employee or applicant for employment because of race, religion, creed, color, sex, marital status, sexual orientation, political ideology, ancestry, national origin; or the presence of any sensory, mental, or physical handicap,

unless based upon a bona fide occupational qualification. The Consultant will take affirmative action to ensure that applicants are employed, and that employees are treated, during employment, without regard to their creed, religion, race, color, sex, national origin; or the presence of any sensory, mental, or physical handicap. The Consultant shall incorporate this provision into all subcontracts as a requirement of the respective subcontractor.

D. Women's and Minority Business Enterprise Utilization. During the term of this Agreement, the Consultant is encouraged to meet the following minimum goals in purchases and contracts, expressed as a percentage of the total dollars available for the purchase or contract:

Minority-owned business participation - 10%.

Women-owned business participation - 6%.

The Consultant is further encouraged to:

1. Include qualified minority and women's businesses on solicitation lists;
2. Ensure that qualified minority and women's businesses are solicited whenever they are potential sources of services or supplies;
3. Divide the total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by qualified minority and women's businesses;
4. Establish delivery schedules, where requirements of the work permit, which will encourage participation of qualified minority and women's businesses; and
5. Use the services and assistance of the State Office of Women and Minority Owned Business and the Office of Minority Business Enterprises of the U.S. Department of Commerce, as appropriate.

In the event that the County, as a result of grant or funding requirements or other reasons, subsequently requires that the Consultant meet the above goals, the County shall negotiate with the Consultant an equitable adjustment in compensation and terms of performance necessitated by the Consultant's compliance with said goals.

E. Employment. Any and all employees of the Consultant or subcontractor, while engaged in the performance of any services required by the Consultant under this Agreement, shall be considered employees of the Consultant or subcontractor and not of the County; and any and all claims made by any third party, as a consequence of any negligent act or omission on the part of the Consultant's employees or other persons while so engaged in any of the work or services provided to be rendered herein, shall be the obligation and responsibility of the Consultant.

The Consultant shall not engage, on a full- or part-time basis, or other basis during the period of the Agreement, any professional or technical personnel who are or have been at any time during the period of the Agreement in the employ of the County, except retired employees, without the written consent of the County.

VIII. SUBLETTING OR ASSIGNING OF WORK

The Consultant shall not subcontract any of the services or work covered by this Agreement or any amendment thereof without prior notification to the County.

This Agreement or any amendments thereto are not assignable by the Consultant either in whole or in part.

The Consultant may employ outside specialists to enable the Consultant to complete services as defined under Section III (SCOPE OF SERVICES) of this Agreement or any amendment thereto. Compensation for outside specialists shall be included within the Maximum Total Amount specified under Section VI (COMPENSATION AND TERMS OF PAYMENT) of this Agreement.

IX. LEGAL RELATIONS

A. Applicable Law; Venue. This Agreement shall be construed and interpreted in accordance with the laws of the State of Washington. The venue of any action brought hereunder shall be in the Superior Court for Spokane County.

B. Errors and Omissions; Correction. The Consultant shall be responsible for the professional quality, technical accuracy, and the coordination of all designs, drawings, specifications, and other services furnished by or on behalf of the Consultant under this Agreement or any Amendments thereto. The Consultant, without additional compensation, shall correct or revise any errors or omissions in the designs, drawings, specifications, and/or other Consultant services immediately upon notification by the County. The Consultant's obligations under this Subsection B shall continue after the termination or expiration of this Agreement.

C. Indemnity. The indemnification provided for in this Section IX with respect to any negligent acts or omissions during the term of this Agreement shall survive any termination or expiration of this Agreement.

The Consultant agrees to indemnify and hold harmless the County, its officers, agents, servants, and employees from and against any claim, suit, action, or liability, including expenses incident thereto (each, a "Consultant indemnified claim or liability") arising from, but not limited to, bodily injury or death (including bodily injury or death to employees of the Consultant or its subcontractors), or physical injury to or loss of use of property, arising from the negligence or willful misconduct under this Agreement of the Consultant, its subcontractors, or their respective directors, officers, agents, servants, or employees.

The County acknowledges that the Consultant played no part in the creation or presence of Pollution Conditions (as defined below), if any, which may exist at the Site (as defined below). The County agrees that the Consultant's only involvement with the Site is to perform services in accordance with the terms of this Agreement.

The County agrees to indemnify and hold harmless the Consultant, its directors, officers, agents, servants, and employees from and against any claim, suit, action, or liability, including expenses, incident thereto arising out of services performed under this Agreement when such County-indemnified claim or liability is based on bodily injury to or death of a third party, physical injury to or loss of use of property of a third party, or cleanup costs (including studies and design) which result from Pollution Conditions (as defined below) existing at or emanating from the Site (as defined below) prior to, during, or after completion of services performed under this Agreement, except to the extent that such bodily injury or death of a third party or physical injury to or loss of use of property of a third party, or increased cleanup costs (including studies and design), is caused by the negligence or willful misconduct of the Consultant or its subcontractors, or their respective directors, officers, agents, servants, or employees.

The County agrees to indemnify and hold harmless the Consultant from any and all reasonable attorney's fees incurred by the Consultant or its subcontractors or their respective directors, officers, agents, servants, or employees incident to any third party claim or liability described in this Subsection C, if such claim or liability does not involve negligence or willful misconduct of the Consultant or its subcontractors or their respective directors, officers, agents, servants, or employees; provided further that this indemnification shall be inapplicable if such claim or liability (and the duty to defend the same) is covered under any policy of insurance required of or maintained by any indemnitee.

The foregoing obligation of each party to indemnify and hold harmless is conditioned upon: a) receipt by the indemnifying party of prompt written notice from an indemnitee of any circumstances that are likely to give rise to any claim or liability or any actual claim or liability that falls within the scope of this indemnity, b) the indemnifying party's right to conduct the defense or settlement of any action related to any such claim or liability, and c) the indemnitee's cooperation with the indemnifying party in any such defense.

For the purpose of this Section IX: a) the term "Pollution Condition" shall mean the actual or alleged existence, discharge, dispersal, release, or escape of smoke, vapors, soot, fumes, acids, alkalis, toxic chemicals, liquids or gases, waste materials or other irritants, contaminants or pollutants into or upon land, the atmosphere, or any water course or body of ground or surface water, b) the term "Site" means the land and structures constituting the facilities of the County (specifically the Colbert Landfill) and the surrounding area or any other property designated by the County or by the Consent Decree, and c) the term "third party" excludes employees of the Consultant, their subcontractors or agents, and the County.

D. Remedies Cumulative. Rights under this Agreement are cumulative; the failure to exercise, on any occasion, any right shall not operate to forfeit such right on another occasion. The use of one remedy shall not be taken to exclude or waive the right to use another.

E. Professional Liability Insurance. The Consultant shall, at its own expense, procure and maintain in full force and effect during the term of this Agreement a policy of professional liability insurance providing coverage of at least \$1,000,000 for professional liability for errors and omissions in connection with the professional engineering services to be performed by the Consultant under this Agreement. The Consultant shall furnish evidence of such insurance to the County in such form and at such times as the County shall reasonably require. The Consultant shall maintain such professional liability coverage, if such insurance is reasonably available, for three (3) years after the termination of this Agreement, or any amendment thereto. These insurance amounts and evidence of coverage shall be required of all Major Subconsultants furnishing professional services to the Consultant.

F. General Liability Insurance. Prior to undertaking any services under this Agreement, the Consultant, at its own expense, shall obtain and file with the County evidence of a policy of general comprehensive and vehicle liability insurance. Such policies: 1) shall be subject to approval by the County as to company, form, and coverage; 2) must fully protect the County from claims and risks in connection with activities by the Consultant by virtue of this

Agreement; and 3) shall name the County as additional insured. Such policies shall cover at least the following:

Comprehensive—General Liability Insurance—\$1,000,000 per occurrence, combined single limit.

Comprehensive—Automobile and Vehicle Liability Insurance—\$1,000,000 per occurrence, combined single limit (including all onsite and offsite operations; all owned, nonowned, leased, or hired vehicles).

These insurance amounts and evidence of coverage shall be required of all subconsultants and subcontractors providing site activities.

Said general comprehensive and vehicle liability insurance policies and subsequent renewals must be maintained in full force and effect at no expense to the County throughout the entire term of the Agreement and any Amendment thereto. The respective insurance policies shall state that coverage will not be canceled, suspended, or reduced in coverage or in minimal limits except after thirty (30) days written notice by certified mail has been given to the County.

G. Worker's Compensation. The Consultant shall maintain worker's compensation coverage under the Washington State Worker's Compensation Act.

X. TERMINATION OF AGREEMENT

A. Termination of Agreement for Cause. Either party may terminate this Agreement or any Amendment thereto in the event the other fails to materially perform its obligations as described in this Agreement, and such material failure has not been corrected in a timely manner after notice of breach has been provided to the nonperforming party.

B. For Reasons Beyond Control of Parties. Either party may terminate this Agreement or any Amendment thereto without recourse by the other where performance is rendered impossible or impracticable for reasons beyond such party's reasonable control, such as, but not limited to, acts of nature; war or warlike operations; civil commotion; riot; labor dispute including strike, walkout, or lockout; sabotage; or superior governmental regulation or control.

C. Termination by County for Any Reason. The County may terminate this Agreement for any reason, other than as recited in subsections A and B above, upon thirty (30) days written notice to the Consultant. In such event, the County shall pay the Consultant for all services previously authorized and performed before the termination date, including the Fixed Fee, as well as reasonable termination expenses, including reassignment of personnel, subcontractor termination costs incurred by the Consultant, and related closeout costs.

D. Notice. Notice of termination pursuant to Subsections A and B above shall be given by the terminating party to the other party at least twenty (20) days prior to the effective date of termination.

E. No Waiver of Remedies. Nothing herein shall be construed to limit the parties' remedies for material breach of contract. The County is not obligated to pay any fees or expenses which specifically involve negligent acts or omissions by the Consultant.

XI. SPECIAL STIPULATIONS

A. General. The services under this Agreement shall at all times be subject to the general review and approval of the County. The Consultant shall, periodically during the progress of the work, confer with the County and shall be subject to the direction of the County; and shall prepare and present such information and materials as may be pertinent, necessary, or as may be requested by the County to determine the adequacy of the services.

The working relationship as indicated herein shall exist at the discretion of the Public Works Director; it may be revised at any time upon written notice, at the sole discretion of the Director.

B. Contractual Relationship. This Agreement or any Amendment thereto does not constitute the Consultant as the agent or legal representative of the County for any purpose whatsoever. The Consultant is not granted any express or implied right or authority to assume or create any obligation or responsibility on behalf of or in the name of the County to bind the County in any manner or thing whatsoever.

C. Addresses for Notices and Deliverable Materials. All notices and other material to be delivered hereunder shall be in writing and shall be delivered or mailed to the following addresses:

If to the County:

Mr. Dean Fowler
Spokane County Utilities Department
West 1026 Broadway
Spokane, Washington 99260-0180

If to the Consultant:

Landau Associates, Inc.
23107 100th Avenue West
P.O. Box 1029
Edmonds, Washington 98020-9129

or such other respective addresses as either party may from time to time designate in writing.

D. Professional Services. The Consultant represents that the services furnished under this Agreement will be in accordance with generally accepted professional practices. Any estimate of cost of equipment, construction, ownership, or operation furnished by the Consultant shall be the Consultant's opinion based upon its professional judgment and experience.

E. Endorsement. The Consultant, or its subconsultants (where applicable) shall affix its signature and engineering or land surveying seal (as applicable) to all plans, specifications and reports prepared by the Consultant pursuant to Attachment 1 of this Agreement.

F. Ownership of Documents. All drawings, plans, prints, specifications, field notes, and other related documents prepared or obtained by the Consultant and its subcontractors in connection with the provision of services under this Agreement are and shall be the County's property, and such material shall be delivered to the County upon request. The County agrees to indemnify and hold harmless the Consultant from and against any claims arising out of the subsequent use by the County of any documents provided under this Agreement for any purpose other than the work anticipated under this Agreement. The Consultant shall retain the original of all records, reports, documents, and underlying data generated by the Consultant for a period of ten (10) years after expiration or termination of this Agreement, and the Consultant shall also require its subcontractors to meet this same requirement on behalf of the County.

G. Strict Compliance Required. Strict compliance with the terms of this Agreement is essential for the legal disbursement of public funds, for the purposes described herein. Deviation of any sort from this Agreement terms must be authorized formally in writing. No other authority for deviation from this Agreement will be recognized as proper and official.

H. Amendments. No modification or amendment of the provisions hereof shall be effective unless in writing and signed by the parties hereto. The parties hereto expressly reserve the right to modify this Agreement, from time to time, by mutual agreement.

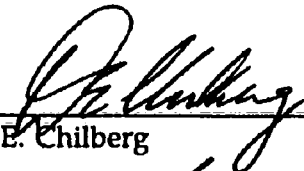
I. Executory Agreement. This Agreement will not be considered valid until executed by both the County and the Consultant.

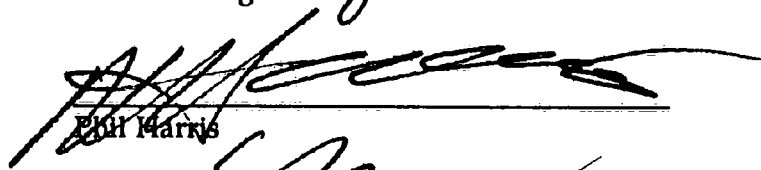
J. Binding Effect. The provisions, covenants, and conditions of this Agreement apply to bind the parties, their legal heirs, representatives, successors, and assigns.

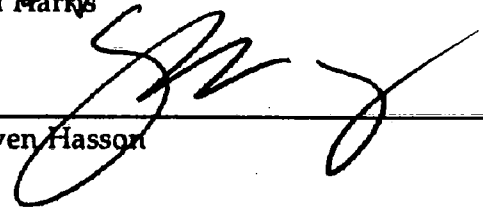
K. Severability. If any of the provisions contained in this Agreement are held, for any reason, to be invalid, illegal, or unenforceable in any respect, such invalidity, illegality or unenforceability will not affect any other provisions, and this Agreement shall be construed as if such invalid, illegal, or unenforceable provision had never been contained herein.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed on the day and year first set forth above.

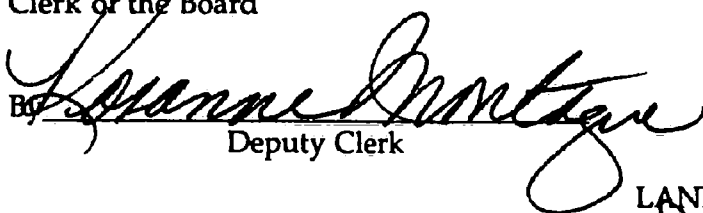
BOARD OF COUNTY COMMISSIONERS
OF SPOKANE COUNTY, WASHINGTON

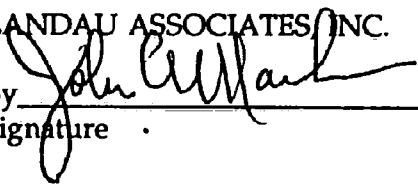

D.E. Chilberg


Phil Harris

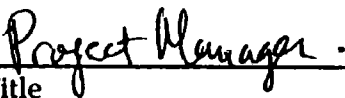

Steven Hasson

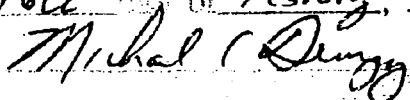
ATTEST:
WILLIAM E. DONAHUE,
Clerk of the Board


By _____
Deputy Clerk

LANDAU ASSOCIATES, INC.
By  2/6/95
Signature . Date

John A. Markus
Type or Print Name


Title

APPROVED AS TO FORM ONLY
this 16th day of February, 1995

Michael C. Dwyer

600 557 469
Washington State Certification
of Registration Tax Number
(Department of Revenue)

ATTACHMENT 1

SCOPE OF SERVICES

INTRODUCTION

This scope of services presents Landau Associates, Inc.'s (Consultant) scope for consulting and engineering services for support of ongoing operations related to the Colbert Landfill remedial action project. It is our understanding that Spokane County will request our services on an as-needed basis to assist Spokane County with resolving a number of issues related to the operation and maintenance of the groundwater interception/extraction and treatment systems, data analysis, and regulatory compliance and reporting. These issues are described in detail below.

The Colbert Landfill (Landfill) is a municipal sanitary landfill owned and previously operated by Spokane County (the County), and was active from September 1968 through October 1986. The Landfill is located about 2.5 miles north of the Town of Colbert, Washington, and approximately 0.5 miles east of Highway 2 (Newport Highway) in the northwestern quadrant of the intersection of the Elk-Chattaroy, Yale, and Big Meadows Roads.

In 1993 through 1994, Landau Associates assisted Spokane County with design and construction management of a groundwater extraction and treatment system that includes 10 extraction wells and an air stripping tower. Treated effluent is discharged to the Little Spokane River. This work was conducted in accordance with U.S. District Court, Eastern District of Washington, Consent Decree No. C-89-033-RJM which defined the site remediation requirements. The site is being remediated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, the Superfund Amendments and Reauthorization Act (SARA) of 1986, and the National Oil and Hazardous Substances Contingency Plan (NCP) (40 CFR Part 300), as well as other applicable or relevant and appropriate requirements (ARARs).

SCOPE OF SERVICES

The scope of services is set forth below with the intent to allow Landau Associates, Inc. to support Spokane County with a number of activities related on operation and maintenance of the groundwater extraction system and treatment facility for the Colbert Landfill remedial action project. The specific scope and level of effort required to accomplish these activities that Spokane County may request Landau Associates, Inc.'s assistance are not known at this time.

It is anticipated that other unforeseen issues may arise during the period of this Agreement where Spokane County will request Landau Associates, Inc.'s assistance. However, to establish a general framework for the types of activities that may be included in the scope of services, the following have been identified:

1. Sampling, potentially including sampling of ambient air, stack exhaust, groundwater, extraction wells, monitoring wells, treatment plant influent/effluent/outfall, and receiving waters (i.e., the Little Spokane River). This work may include preparation of work plans and sampling procedures, identifying and coordinating with analytical laboratories, procuring sampling equipment, and performing sampling.
2. Data validation and data validation training of Spokane County personnel, for all sampling described above, and for groundwater extraction and treatment system physical and operational parameters.
3. Data analysis, including preparation of data summaries and graphical aids, analysis of trends, statistical analysis, and comparison of parameter values to setpoints and goals.
4. Reporting, including preparation or review of quarterly and annual reports for submittal to Ecology, EPA and/or the public.
5. Data management/database development and implementation, including assistance with configuring and installing a database system, and training facility operators with data entry, analysis, and report generation.
6. Environmental fate and transport modeling, including air dispersion modeling and/or groundwater modeling. Groundwater modeling may include optimization of the previously developed site-specific groundwater model to incorporate data obtained since facility startup relating to contaminant locations and concentrations and groundwater drawdowns/levels. Air modeling may be warranted to revisit potential risk levels or to evaluate the facilities contribution, if any, to the odor problems identified in the area.
7. Regulatory assistance, including participation in negotiations with Ecology and EPA on issues including NPDES discharges, such as permitting, monitoring, data analysis, reporting, and public participation; and the Consent Decree, such as aquifer management, groundwater modeling, facility optimization, remedial action progress, and monitoring.
8. Public participation, including preparation of fact sheets, involvement with public meetings, and conducting facility tours.
9. Design modifications for facility optimization, including engineering analysis, design, and planning services for installation of additional monitoring wells and other issues.
10. Training of facility operators, including instruction in routine plant operations, record keeping, and equipment maintenance, and with nonroutine activities such as equipment repair or air stripping tower batch cleaning.

11. Assisting facility operators for nonroutine activities including equipment repair, unusual maintenance, conveyance pipeline leak testing, evaluation of scale control chemicals, or air stripping tower batch cleaning.
12. Emergency response, to address equipment breakdowns, conveyance pipeline leakages, environmental release of contaminants, or other problem.
13. Project management, including coordinating with Spokane County regarding work orders and routine project accounting.
14. Operations audits, including review of facility records, operator work practices, documentation, adherence to operation and maintenance schedules, adherence to sampling and reporting schedules, and equipment functionality and calibration.

These activities may be supplemented or replaced by others, at the direction of Spokane County based on the requirements of the remedial action and needs of the facility and the facility operators.

TASK AUTHORIZATION

Work under this scope of services will be authorized by task by Spokane County Public Works Director or his authorized representative. For each task authorization, Spokane County will prepare a letter of authorization describing the specific Task scope of services, approved budget, and schedule. At the request of Spokane County, Landau Associates, Inc. will prepare task authorization letters on Spokane County's behalf and submit them to Spokane County for approval.

ATTACHMENT 2

BUDGET AND SCHEDULE

Based on the scope of services and effective duration of the Agreement described in Attachment 1 and based on the level of work effort anticipated to be provided by Landau Associates, Inc., a budget of \$225,000 is allocated. Table 1 provides a breakdown of this budget allocation into consultant labor, overhead, direct expenses, and estimated fee. The actual budget allocation and distribution will depend of the nature and scope of tasks specifically authorized by Spokane County. Schedule of completion will be defined when appropriate with each task authorization, respectively.

TABLE 1

**COLBERT LANDFILL REMEDIAL ACTION TECHNICAL SUPPORT SERVICES
ESTIMATED COST BUDGET**

TOTAL PROJECT

Estimated cost for scope of services defined in Section II and Attachment 1 of the Agreement.

Category	Budget
Consultant Labor at Direct Payroll Cost	\$ 68,500
Consultant Overhead (164 percent)	112,340
Direct Expenses	15,226
COST SUBTOTAL	\$ 196,066
Consultant's Estimated Fee ⁽¹⁾	28,934
MAXIMUM TOTAL AMOUNT COST	\$ 225,000

(1) The Fee estimated as 16 percent of consultant's direct payroll plus overhead costs.